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ABSTRACT

This series of the third, fourth, and fifth annual reports to the Bernard Van Leer Foundation on the Mt. Druitt Early Childhood Project of Macquarie University, Australia, describes the general activities, program developments, and research activities of the project for the period 1977-1979. The main objective of the project is to develop, implement and evaluate five different preschool programs in the Mt. Druitt area. These programs are the contemporary program, the behaviorist program, the competency program, the cognitive program, and the home base program. The approach in all of these programs changed over the years from an interventionist one to an interactionist one. Research activities focused on language, parent expectations, behavior observation, mathematics, parent perceptions of their roles and of the programs, teacher observations of parent and child, and children's play and nutrition. (Author/SS)

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MT. DRUITT EARLY CHILDHOOD PROJECT

School of Education

Macquarie University
North Ryde, Australia. 2113

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THIRD ANNUAL REPORT
TO
BERNARD VAN LEER FOUNDATION

January, 1978

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Research Assistants:	Barbara Ashford Judy Grant Carolyn Weick
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PROJECT SCHOOLS

School	Principal	Infants' Mistress
Bidwill	Mr M. Hardes	Mrs L. Thomas
Dawson	Mr I. Feneley	Mrs J. Putland
Madang Avenue	Mr J. Eddington	Miss C. Kogel
Mt. Druitt	Mr D. McIntosh	Mrs M. Jagoe
Whalan	Mr D. Wagner	Mrs J. Watson

List of Teachers

Dawson Preschool

Teachers:	Wendy Johnston*
	Robyn Page
	Gillian Makinson
Aides:	Yvonne Scrine
	Chris Sykes

Madang Avenue Preschool

Teachers:	Anne Barnier
	Margaret Tafe
Aides:	Narelle Cunningham
	Elizabeth Bryden

Mt. Druitt Preschool

Teachers:	Sue Tanner*
	Jenny Mayo
	Sue Tinworth
Aides:	Val Darby
	Liz Savage

Teachers:	Margaret Bouvet
	Pat Meyers
Aides:	Carole White
	Irene Gallon

Bidwill (Home Base)

Teachers:	Lorraine Mead
	Pam Parker
	Genevieve Finn
	Susan Smith

* left during 1977

ACKNOWLEDGEMENTS

Once again the Project personnel must acknowledge the substantial assistance it has received from many individuals and agencies with whom it has come into contact. The nature of the evaluation activities over the year has imposed additional calls upon the goodwill of children, parents, teachers and school administrators. All have responded wholeheartedly to our requests for assistance and guidance whenever it has been requested.

As in past years we must thank the children and their parents, the teachers and aides and the school principals, infant mistresses and educational administrators in the N.S.W. Department of Education for their professional and personal contributions over the years. Further, our colleagues within the University have unselfishly given us guidance whenever requested and the officers of the Health Commission at the Mt. Druitt Polyclinic have been extremely generous with their time and assistance.

The forthcoming publications of the Project's activities will readily illustrate the extent of involvement and commitment that the various individuals and agencies have given to the Project's objectives. Above all, we must thank the Bernard van Leer Foundation for their support of our activities over the past three years and for their willingness to fund our activities in the second phase of the Project's developments.

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PREFACE

This third Report to the Bernard van Leer Foundation highlights the activities of the Mount Druitt Early Childhood Project during 1977. As the second Report differed from its predecessor, so this one differs from the two previous Reports. The following pages summarise the Project's activities during 1977 and do not contain any results from the comprehensive evaluation studies that were carried out during the year.

Such detailed accounting of the Project's activities during the first phase will be published in subsequent documents and these will describe in detail the development, implementation and evaluation of the Project's programs.

The presentation of this Report covers the same areas that were presented in previous reports, namely -

Part A covers the general activities of the Project in 1977;

Part B comments upon the developments within each program;

Part C consists of a summary of evaluation activities in 1977; and

Part D looks at future developments within the Project as it enters its second phase in 1978.

Again, as in previous reports, individual program assistants comment about their own areas of involvement. Hence there are variations in the scope and extent of coverage in each area.

Kodaly music activities at Dawson school

PART A

GENERAL ACTIVITIES OF THE PROJECT IN 1977

INTRODUCTION

In the original request to the Bernard van Leer Foundation for funding, the main objective of the Mt. Druitt Early Childhood Project was stated as being "to develop, implement and evaluate five different preschool programs in schools in the Mr. Druitt area". The ethos behind the original proposal reflected the prevailing belief in the early nineteen seventies that many of the perceived difficulties that disadvantaged children have in school could be alleviated through the provision of worthwhile educational programs. Such an interventionist viewpoint originally motivated the Project staff but it soon became apparent over the years during which the Project has been established that such an approach is largely a sterile one. Progress towards providing worthwhile educational experiences for the children and their parents in the area, could not be achieved successfully utilising an interventionist approach, and the change towards an interactionist approach was gradually made.

Looking back to our initial endeavours it is salutary to see how we have modified our styles of development, implementation and evaluation. We have still achieved our original objective of developing and implementing the programs. We have, however, adopted a more interactionist style of involvement in the development of our programs. Largely this has arisen as we have realised the value of working with parents and community agencies to achieve our objectives. It is not that we have not fully co-operated with and received excellent support from the schools and teachers, but rather that we realize that by extending the network of people with whom we interact, the more capable we will be of developing more lively and valid programs. It is this style of operation that we intend to continue in the second phase of the Project's operations. Involvement with parents, school administrators, teachers and other interested groups cannot but help to enrich the various programs.

The following sections summarise some of our developments and happenings over the year. The complete evaluation will have to await subsequent publications in 1978.

PROJECT DEVELOPMENTS

Nineteen seventy-seven has been a year during which the Project devoted the majority of its endeavours towards the evaluation of each of the five different preschool programs. The evaluation design called for an extensive data collection process which focussed not only on the preschool children and their teachers, but upon the school, the parents and the community. The enormity of the data collection task meant that the Project staff had to devote a large proportion of their time to it. Nevertheless, the opportunities that became available to extend the Project's activities and to consolidate previously established ones, were taken up and these are discussed in subsequent sections.

All of the programs had 'settled down' quite successfully by the beginning of 1977 and were operating along the predetermined lines. This was due to the skill and enthusiasm of the teachers and aides involved in all programs and undoubtedly any successes that the Project has had, have been due in no small way to their contributions. In the one school where a change in staff was necessary because a teacher took maternity leave, we were able to replace her with an exceptionally versatile young teacher who responded to the task of carrying out the particular program extremely competently. Throughout the year increasing demands were placed on the personnel in the various schools by the numerous evaluation activities and increased numbers of outside visitors. All teachers, aides and parents generously co-operated with the requests from the Project staff for assistance and the schools provided worthwhile and enjoyable programs for all the children enrolled in them.

A number of new activities involving parents and community members were implemented but there is still concern that parents often fail to heed the Director-General of Education's invitation to become involved in school activities and to participate with the school in their child's education. The need for the schools to go out and show parents that their involvement is sought, cannot be stressed strongly enough. This activity of working with the schools to integrate the Project's activities successfully into the community will receive heightened attention in the second phase of the Project's activities.

One of the most gratifying aspects of the year's activities has been the willingness of the schools to continue on with the preschool programs that have been developed, in subsequent years. We believe that all the programs are successful and provide children in the Mt. Druitt area with worthwhile educational experiences which will enable them to develop their individual abilities and develop a positive attitude to schooling. Our belief in the worthwhileness of the programs has been reinforced by the N.S.W. Department of Education's willingness to continue on with the home-based program at Bidwill as an integral part of that school's curriculum. Further, we believe that the programs are practical and can be sustained when the direct involvement of the Project staff is transferred to other classes. This sustainability is of course an essential feature in the development of innovative educational practices. We shall be monitoring the preschool programs over the next two years to ascertain the degree to which the original programs have survived.

Though a considerable amount of the Project staff's time was devoted to evaluation activities, planning for the continuation of the programs into Kindergarten was carried out. Extensive discussions were held with educational administrators, principals and infant mistresses (about the objectives and the organisation details of the programs). These discussions enabled all the participants to share in the development and extension of the programs for the higher grades. Subsequent discussions on the nature of the programs were also held with the teachers who were going to be involved in the programs in 1978 and with interested parents. Unfortunately, there was no opportunity to conduct intensive in-service courses for the teachers as had been the case with the preschool teachers in 1975. However, the schools made individual arrangements to enable a number of planning sessions to be held and the teachers freely gave of their own time in order to achieve a basic consensus about each individual program so that the programs could begin successfully in kindergarten in 1978.

All in all we have viewed 1977 as quite a successful year. We have accomplished our basic objectives for the year and have gained sufficient strength and insight to see where our future challenges and developments lie. The willing co-operation of the schools and the parents will, we are certain, be maintained so that we can endeavour to provide the children in the area with exemplary educational experiences.

Parents at Bidwill School share activities with their children

PROJECT MANAGEMENT AND PERSONNEL

PROJECT MANAGEMENT

The Standing Committee of the Project, which has the responsibility for all policy decisions, met on several occasions throughout the year. Dr Gary Andrews, on his promotion within the Health Commission, resigned from the Committee but recommended that Dr John Harley, the newly appointed Regional Director should be invited to take his place on the Committee. This recommendation was agreed to and Dr Harley has been a helpful addition to the Committee's deliberations. We would like to pay tribute to the willing co-operation of Dr Andrews in assisting the Project's objectives during his period as a member of the Standing Committee.

The Field Committee, which has the responsibility of guiding the Project's activities at the local level, provided valuable guidance throughout the year. The willingness of all the committee members to co-operate with the Project personnel, is greatly appreciated and many instances have occurred wherein the advice tendered by committee members has been of great assistance to our endeavours. Indeed, in many ways the open and valuable discussions that have been characteristic of the Field Committee meetings have contributed to the positive attitude that teachers and parents have towards the Project's activities. Such co-operation is often minimised but there are too many examples of worthwhile activities that have floundered because of the unwillingness of various personnel to share in the planned developments. Such a situation has not arisen within the Project and we sincerely thank the school administrators, teachers and parents concerned.

As mentioned in the previous report, various administrative arrangements have developed within each school which involve both teachers and parents. The central purpose of these groups is to support the preschool programs, to provide ways in which the parents can contribute to the development of specific activities, and to be a more formal means whereby the school can communicate with parents about the preschool's activities. Again, as in previous years, a wide variety of responses was encountered from the parents regarding their effective involvement with such committees. There is no doubt that some parents do not see that they have anything worthwhile to contribute to such situations, an attitude which schools in general have reinforced in past years. To encourage such parents to become involved has required an active effort on the part of the various committee members. Fortunately, their endeavours were often rewarded as parents have formed self-interest groups about specific issues.

PROJECT PERSONNEL

a) PROJECT STAFF

Again we must pay tribute to the enthusiasm and abilities of the Project staff over a year which has been more onerous than anticipated. Little did we fully appreciate the complexities that the evaluation activities would entail and the concomitant amount of time needed to see such activities completed. The willingness of staff members to work co-operatively has strengthened the work of the Project. Undoubtedly all have

benefitted professionally in being associated with the Project and have gained great insights into the complexities associated with the development, implementation and evaluation of early childhood programs.

b) TEACHERS AND AIDES

Mention has been made elsewhere of the valuable contributions that all teachers and aides have made to the Project's activities. There is no doubt that all have responded encouragingly to the demands that have been placed on them over the year. They have all contributed their time and effort to the development and modification of the programs and to guiding the many parents who wished to share in the various activities. Further, the increasing number of visitors "all eager to find out everything" placed increased demands upon the teachers who were only too ready to discuss and explain particular issues.

Again, as was mentioned in previous reports, every attempt was made to ensure that all teachers and aides felt that they were an essential part of the Project's activities. Regular inservice days were held at which evaluation information, Project developments and general information were shared. This inservice activity culminated in the end of the year 'presentation of findings' wherein the tentative results of our evaluation were discussed. This final presentation was appreciated by all the teachers, aides and administrators who attended.

DEMONSTRATION AND DISSEMINATION ACTIVITIES

The Project has paid increasing attention to this aspect of its activities during 1977. We have seen it as one of our major responsibilities to respond wherever practicable, to requests to visit the Project schools. Generally these requests have come from universities, colleges of advanced education and technical colleges, training potential teachers and aides. Usually such visits involved an explanation by the Project staff of the general nature of the Project's activities followed by active participation by the students in the various activities that were occurring at the time. In addition, some institutions placed students in the various schools as part of their regular pre-service training experiences.

Other visitors from a wide variety of occupations, ranging from town planners to professional educators and administrators, also came to view the Project's activities. Every opportunity was taken to discuss with the various individuals and groups, aspects of their observations. To facilitate such discussion and to provide Project staff and teachers with formative feedback, each visitor was requested to complete a questionnaire about the Project. These completed forms became a valuable discussion starter and provided a continuing account of how others view our activities.

One of the most pleasing aspects of the year was that a number of visitors came from interstate, Canada, New Zealand, U.S.A., Thailand, Malaysia and Great Britain, to share with us their perceptions. In most cases the mutual dialogue that was established was extremely rewarding to us and the visitors went away with a more thorough understanding of our endeavours.

The expertise gained by the Project's staff has also proved to be of value in the advising of people who are concerned with the development and evaluation of a variety of educational programs. There have been a wide range of people who are concerned with the development and evaluation of both small and large scale projects who have spent considerable time discussing various aspects of the Project's activities. The expertise that the Project's staff has acquired, has been of considerable assistance to many people and the value of such help cannot be discounted.

Over the year members of the staff have been invited to present papers on various aspects of the Project's activities, to lead discussion groups and to write articles for a number of publications. Certain aspects of the Project have received publicity in national publications and radio presentations. With the co-operation of the Australian Film & Television School, a colour videotape which presents an overview of the Project, has been produced and is in the final stages of editing. Numerous requests are continually being received for various publications and these are supplied wherever possible. To disseminate information as widely as possible, copies of all our papers have been placed in a number of libraries throughout Australia and some have been selected for inclusion in the ERIC system.

The compilation and publication of the evaluation study of the first phase of the Project's activities will be undertaken in 1978.

ENROLMENTS

During 1977 four of the five programs maintained full enrolments over the year. The fifth program had unanticipated vacancies in the afternoon session but a survey of the local neighbourhood revealed that the pre-school had enrolled well over 90% of the potential children in the area. This indicates a settling down of the population growth in the area as the large cohorts of children pass through the upper grades of the school system. One pleasing aspect was the ready acceptance of the Home-based program at Bidwill where each teacher had a full complement of families. Such a situation is expected to continue in 1978.

SCHOOL - COMMUNITY INVOLVEMENT

In our previous report we commented that progress toward parental and community involvement in schools was evolving slowly. The same comment may be reiterated for 1977. However, several events occurred during the year which have tended to reinforce the Project's objective of fusing school and community together. While these events were not initiated by the Project's staff, they did involve members of the staff at different stages and are worthwhile including as instances which highlight the fact that schools in the area are taking the initiative in strengthening school-community relationships.

Such examples include -

a) The parent-teacher conference of the combined inspectorates designed to gain insight into the community's expectations of their schools and to involve the community more in curriculum planning.

b) The involvement of parents through intensive discussion sessions, in the formulation of school policies, as at Madang Avenue school.

c) Consideration of the relationships that Bidwill school should have with the community during the school appraisal by actively involving parent groups.

Within the Project the schools have continued to welcome and actively solicit the involvement of parents within its programs. As in the past there has been a variety of responses to these invitations but we believe that parents are becoming more aware of the value of their closer involvement with their children's schooling.

The following more detailed account of community involvement activities at Mt. Druitt school serves as an example of the type of activities the Project is undertaking.

COMMUNITY INVOLVEMENT AT MT. DRUITT SCHOOL

Two general initiatives were taken by the staff at Mt. Druitt Preschool in the area of community involvement. Firstly, moves were instigated to provide a talking forum for parents. While parents had been participating in a voluntary and informal way in classroom activities with enthusiasm and enjoyment, teachers wished to provide a set of experiences which would assist parents in understanding the program at the preschool more fully. Secondly, contact was made with the local high school to set up a program which would include visits to the preschool and which would fit the aims of the personal development courses running at the school. Such interaction was seen as beneficial to both the students and the children at the preschool. Eventually, it was hoped to bring together parents, high school students and other people in the community for discussions concerning child development, parenting and vocational interests. This final synthesis was not achieved, largely because of the specific aims that grew up for each group, rather than a lack of willingness on the part of either group.

From the beginning of the year, parent interest in the preschool had been assured. From the questions that parents were asking, about the program and about their children's performance within it, it was obvious that an opportunity for input and discussion should be set up. Teachers decided when the sessions should be held and what the content should be on the basis of what they perceived to be parent needs. Input was achieved through the use of films and talks on child development and school experiences. People available to talk with parents included the preschool staff, the community nurse based at the school and the program assistant. While parents were interested in the growth and education of their children, they also discussed parenting practices eagerly among themselves.

Some film/discussion days were very well attended, others less so. However, we felt that success should not be counted only in terms of numbers, for discussion was often animated as issues were being explored. Certainly, interaction became easier as time went on. Many of these parents have now requested that they be involved in the activities of the Kindergarten class. Actual participation in the preschool, and communication with other parents, have led parents to offer a continuing commitment to the idea of parent involvement.

High School students interact with preschoolers

The nature of the involvement in the preschool of students from a local high school was determined by the requirements of the program being conducted at the high school and the needs of the children at the preschool. The high school was providing a work experience program which had a vocational emphasis. Students were given the opportunity to explore various fields which interested them as areas of future employment; teaching was one of these. Their program entailed a basic strategy of input at high school level followed by "in the field" experience. Students kept a diary of their experiences in the preschool. They noted down their planned activities, the children's responses to them and also unexpected outcomes of interactions. Finally, a videotape was made of students initiating and sustaining an activity which was screened for them at a final session. The tape will be used as a training film for students interested in the same type of experience next year.

We noticed that sessions at the high school tended to be less interesting for students than the fieldsite experiences. Originally, we intended to have discussions after each fieldsite experience, so that students could pool ideas, but this never eventuated. We feel that all sessions would be better conducted at the fieldsite, where input and practice could be closely related. Feedback from both teachers and students confirmed that the interaction with the children was seen to be the central part of the program. Teachers commented that the students "contacted children well and communicated with them fluently and easily", and "they were task oriented, purposive and interactive". Students for their part said that "... the teachers were willing to co-operate with us when we came ... we did learn from the experience - how to co-operate with the children". "I enjoyed the time we spent with the children. I feel I learned quite a bit about children's behaviour. However, I do not feel that preschool teaching is what I would like to do."

Across the Project the previously established film groups, discussion groups, high school student interaction programs and personal development courses have been continued quite successfully and we intend to extend these contributions wherever possible in 1978.

All in all we feel more positive about the potentialities for realistic school-community involvement in the forthcoming years as teachers and parents appreciate the mutual benefits that such co-operation engenders. Certainly the continuous support of the administrators within the Education Department will assist in bringing the schools closer to the communities they serve.

PART B

PROGRAM DEVELOPMENTS

IN 1977

THE CONTEMPORARY PROGRAM : MT. DRUITT PUBLIC SCHOOL

The program that has been followed at Mt. Druitt school in 1977 follows the outline that was presented in the previous report and the following formative comments reflect changes that have been introduced during the year. The alterations to the program this year were made by consensus of staff on the site, and represent a growth in understanding of basic objectives and the development of new strategies in dealing directly with the needs of children within the preschool setting.

1. ALTERATIONS TO DAILY PROGRAM

Several alterations to daily procedure became desirable during the year to improve the variety and quality of the children's interactions with materials, adults and other children.

a) Indoor period for afternoon session

An indoor period was introduced for children attending the afternoon session, because teachers felt that many children were not sampling the full range of preschool activities of their own accord. During this period, children were given a choice of many creative activities with blocks, painting, water play, free cutting and pasting, as well as other standard indoor activities such as puzzles, house corner, etc. Teachers were alert for any signs of irritability among the children, but report that the children accepted the arrangement readily. The time allowed, while flexible, was usually about half an hour, when the children themselves brough it to a natural conclusion. Teachers reported that the children for whom it was primarily intended soon spontaneously selected a variety of activities, and that mothers were more encouraged to stay when they saw their children involved in activities which enabled them to join in freely.

b) Music time

A music time was introduced on a daily basis halfway through both morning and afternoon sessions. Teachers had found that by the end of a session children were often tired and this in conjunction with insufficient remaining time had meant that music activities were often neglected. The children found the music time enjoyable, the teachers felt that regular participation improved music skills, and the large group setting gave teachers the opportunity 'to point children's attention to activities that were ongoing, especially creative activities'.

c) Small language groups

These events became a regular part of the preschool routine in 1977, and occurred at the end of each session. Although they took place daily, their composition had never been formalised, and the groupings remained flexible. Teachers felt that the main benefit the children derived from these groups was that their communicative abilities improved, since the

face to face contact encouraged direct participation. For some children, more specific benefits, such as an increase in attention span were noticeable. Next year, a similar organisation will be used for rhythm and percussion.

2. PROGRAMMING AND EVALUATION

In this area, the teachers modified their practices so that physical limits could be placed on effort without compromising the individual approach of the program. The following points were noted by teachers in reviewing the efforts of 1977 for planning consideration in 1978.

a) Groups would be allocated to staff members on the first day. While flexible grouping had its strengths, it was felt that the close relationship between teacher, child and parent that can be fostered in small groups helps with documentation as well as interaction.

b) Specific objectives would be set up for activities in each area of the preschool. This would not only clarify objectives, but would allow economy in writing comments on children's achievements.

c) Programming was done 'open book' style, with programming and comments on children's responses to activities side by side. Improvement to the present system would be achieved by a more persistent regularity in recording by all staff members, and by releasing one staff member during routines to plan specific language/music activities.

d) The checklist was seen as an important diagnostic and evaluative activity, if the program is to cater for different levels among activities. In the words of one teacher "If we start on our child studies, and checklists on a regular basis with the aim of having a summary at the end of each term, we'll be considering each child individually".

e) Program content has come from the children during the year. Teachers report that they rarely consciously arrange input because of "the high level of interest from practically every child". Natural Science was a constant source of contribution and discussion from the children.

All these changes represent a growth in planning, and a confirmation that individual needs are being accepted and catered for. Next year will see further development of the specific objectives and activities that permit intervention with individual children.

3. BENEFITS OF THE PROGRAM

In discussion, teachers isolated several areas of special contribution to the children's development made by the program.

a) <u>Originality in use of materials</u>

This was especially true of the building equipment. Children often rearranged equipment to facilitate role play.

b) Social growth

The growth in the children's socialisation skills was "very apparent" and "really remarkable by third term". Children were "moving out of close dependent couples into flexible accepting types of groups". One teacher believed that "this would be a skill that would help the children adjust to the larger dynamics of a kindergarten class."

c) Confidence in approaching adults

Teachers feel strongly that community involvement in the preschool, particularly the interaction with the secondary school students, helped the children to develop ease in approaching adults. Children were not threatened by adults and developed a maturity in coping with visitors.

d) Independence in choosing activities

The growth of this competency was described by one of the teachers thus:- "It is not very often that you have to offer a child a range of choices or suggest an activity".

e) Growth of personal skills

Teachers attribute the growth in skills to the emphasis given to creative activities during the year. Some comments made by teachers point to the variety of skills the children acquired. "I don't hear children say 'I can't do it' very often. They are more confident in their ability to do things. They look proud rather than embarrassed when they show you their work."

"There is more detail in their work. It is more imaginative, more individualistic. They no longer rely on copying."

"It was interesting when we were doing the roof of the stable, a rather directed activity, that not many people wanted to help."

These changes took place with the more broadly changing context of community and school involvement. Teachers are enthusiastic about the prospects for further involvement with parents and have planned more detailed parent involvement/education next year. Reciprocal visits with primary and infants classes, and a sharing of common functions have helped to develop a sense of being a contributing part of a larger school setting.

THE BEHAVIOURIST PROGRAM : WHALAN PUBLIC SCHOOL

This year saw the consolidation of a number of aspects of the Behaviourist Program in the light of experiences gained in 1976. One practical outcome, for example, was that objectives were specifically defined in terms of observable behaviours. For example, rather than the child 'knowing' or 'appreciating' oral directions, the objective was described as 'the child can follow three oral directions in correct sequence'. Appropriate reinforcers were further refined and elaborated, especially with the use of descriptive praise. Also, the careful recording of children's progress was maintained through the detailed use of individual record cards. All these aspects of the Behaviourist Program were continued and refined throughout the year. Another aspect which received further attention in the year was the use of the revised pretest used to locate areas of individual children's specific weaknesses and strengths. Those children who were not mastering a specific skill received individual teacher attention until mastery was achieved. By the regular use of individual pupil record cards the teachers were able to maintain a detailed source of continuous and corrective feedback on pupil entry level placement and progress.

When viewed in aggregate, the individual record cards also served as a one-glance summary of all the children's progress in each area of pre-reading, pre-number and pre-writing. Generally, by the end of 1977, the Behaviourist Program had accomplished the majority of the stated objectives. It was felt by the teachers that, for next year, very few of the objectives would need to be altered. From a working insight into the abilities of the children, only a few of the skills appear to be beyond the developmental capabilities of preschool aged children (e.g. skipping). If, however, discussion with parents should indicate that certain changes are desirable, the necessary alterations will be made. It is hoped that by giving the parents of the 1978 intake the opportunity to discuss the preschool objectives, a joint 'contract' of mutual agreement can be agreed upon.

This 'contract' is not a legal document in any sense but rather the result of the coming together of teachers and parents to think out the best ways of reaching their mutual goals.

Besides the evaluation of pupil achievement, the teachers' behaviours were monitored late in the year. After a virtual absence of program supervision by the Program Assistant for six months, in order to allow the viability of the program to survive or perish under the teachers' stewardship, the teachers' behaviours were rated according to the Instructional Teaching Criteria Observation form. This was to ascertain whether the teachers were still implementing the program.

In summary, the teachers' behaviours met nearly all the requirements of the checklist. Time-out was not used, 80% of the children were on task, 100% of teacher initiated interactions with with children on-task, 100% of these contacts contained praise and no disapprovals were used. The only criterion not met was that 90% of the contacts with prompts also contained descriptive praise. Further practice is still required to develop expertise in the use of descriptive praise and it appears essential that the teachers' use of praise be monitored more frequently to achieve an acceptable level.

Discussions with the teachers over the year have frequently led to the problem of the 'artificiality' of the over use of praise. The teachers felt that the criterion level of 100% of contacts needing to contain praise lead to over-saturation. The children developed an attitude that the praise was not sincere and so its reinforcing value was lost. At various times the teachers deliberately varied and reduced the frequency of praise and found that the increase in appropriate behaviours from the children was inversely proportional to the amount of praise.

The teachers developed two main strategies in their use of praise. One strategy was that of control. If inappropriate behaviour occurred, the teacher ignored it and prasied descriptively the appropriate behaviour being manifested by another child. The second strategy was the praising of children when they were on task and when they least expected it. This was an attempt to give a feeling of spontaneity and genuineness to the praise.

An external observer's report made on the 24th November, 1977 on the Behaviourist Program succinctly summarises the atmosphere in the Program.

> "The observer has obviously seen the program at a time of year when both the teachers and children are working skillfully and securely in the routines established. Perhaps the most startling difference observed in this program is the teacher control of the children in group sessions.
>
> Individual teaching situations appear to be of a thoughtful, warm and high standard. Most impressive! At worktime the children were free to choose activities which were selected beforehand by the staff. Some of these were of an expressive nature.
>
> The observed program is certainly consistent with the stated principles. Yet there are other features of the program which are not stated in the objectives but are, in the opinion of the observer, apparent. There is the warmth of the inter-personal relationships between adults and children, and the child/child. Also, during the worktime, the children are freely making decisions and acting independently. It appears a pity that these factors are not more widely acknowledged as being integral to the program."

Over the year a number of parents became closely involved in the school. These parents interacted successfully with the children, shared in a team teaching situation with the teachers and helped prepare materials. The teachers appreciated these parents' interest and participation. However, the teachers did express disappointment with the number of parents interacting in the preschool and felt that next year more thought needs to be given to actively encourage a greater number of parents in the preschool.

An underlying problem regarding parents in the preschool, specific to this program, has been a previously acquired attitude of insecurity in the teachers who previous to the Project had not been exposed to public scrutiny. The major form of professional assessment in the N.S.W. educational system, is inspectorial supervision. This, in part, has led to a certain amount of anxiety becoming attached to being observed. With parents in the preschool, the teachers that they were under microscopic supervision and this feeling of insecurity has been intensified rather than diminished over the year.

THE COMPETENCY PROGRAM : MADANG AVENUE PUBLIC SCHOOL

The program as outlined in previous reports seeks to specify which elements teachers, administrators and parents see as crucial for the children's later success in school. These elements or competencies cover the cognitive, affective and psychomotor domains and have been elaborated during the development of the program by the teachers. The ultimate goals are to help the children to be socially competent and to develop positive attitudes towards schooling.

By and large the teachers believed that they achieved their objectives for the year. They felt that their understanding of the program became more comprehensive in 1977 and that they were able to establish routines which facilitated the attainment of the target competencies. In the afternoon session the attendance of comparatively few children necessitated changes to the routines that had been established. While the small numbers enabled the teachers and aides to pay greater individual attention to children, it restricted the range of activities the children became involved in. The planning sessions had to allow for a wider range of activities to give the children the opportunity to become involved in a greater number of different activities. Therefore, the routines between the two groups differed in the extent to which the potential choices available to the children were structured. Yet at the end of the year no discernible differences between the behaviours and knowledge of the children in the two sessions were apparent to the teachers and aides.

The final completion of the outside play area provided a welcome extension of the type of motor skills and activities that could be developed. Unfortunately the actual design of the play equipment and its siting left a lot to be desired as the location of specific materials unduly restricted the children's activities. It was believed that more effective utilisation of the space could have been achieved.

There was a willing co-operation by parents to help the school whenever the need arose. However, the ongoing active involvement of parents in the school's activities was restricted to only a small core. It was difficult to sustain the involvement of all parents and by third term the number of active parents in the school had dwindled. One encouraging feature was the initiation by the parents of their own committee to help the preschool. Many of the parents believed that the previous arrangements to involve them in the preschool were inappropriate and consequently they formed their own group. This new group proved to be a more effective way of involving parents in the school and contributed greatly to its overall running during the year.

The team teaching situation that had been developed in previous years became more established. There was a greater sharing of responsibilities and involvement in the overall activities by all the adults. While the teachers and aides initially found working as a team challenging, over the year they believe that it worked quite well and that "they have become more flexible and tolerant in their teaching because of the need to plan co-operatively." Moreover, the teachers and aides have commented that the opportunity to work within the Project has been of

great personal value to them by "making them more competent teachers with a broader view of education."

In general the objectives that were specified for the program were achieved. Planning and evaluation of their activities by the children was one of the major objectives of the program. Over the year regular attention was devoted to this aspect but some children still had difficulty in evaluating what they had accomplished. Certainly, by the end of the year all children were more independent in initiating activities.

As in any program there were unanticipated outcomes during the year. Some of these were:

- the attainment of more involved mathematical concepts than expected;
- more tolerance between the children and greater respect for each other;
- easy acceptance by the children of the numerous adults that visited the school; and
- more co-operation in achieving tasks than was anticipated.

More specific comments about the targeted competencies follow but as is generally the case it is sometimes difficult to know whether growth in specific areas reflects program emphases or general developmental influences.

a) SOCIAL SKILLS

The children became more socially aware over the year and this has been reflected in their ability to ask appropriate questions and seek answers, their greater awareness of others, their ability to follow directions and to adhere to established rules.

b) GROSS AND FINE MOTOR SKILLS

Hand-eye co-ordination developed over the year with less developed children receiving individual attention. Most children have mastered gross motor skills adequately and two-thirds of them could easily complete the sequence of puzzle games that were provided.

c) HEALTH AND SAFETY

The children have responded well to the requirements that have been established for health and safety. There have been few accidents and the children are able to perform socially acceptable tasks without untoward concern on their part.

d) COMMUNICATION SKILLS

The development of these skills has been satisfactory and the children could express themselves well. Their vocabularies have increased through the learning experiences that have been provided. The area that has undergone greatest improvement is the increase in the attention span shown by the children.

e) OTHER COMPETENCIES

Most children had mastered the skills involving knowledge of primary and secondary colours, basic shapes, spatial relationships, sorting according to size, colour or function, labelling and basic seriation skills. Constant reinforcement has been found necessary to achieve mastery.

The forthcoming year sees the program being extended into Kindergarten and this will necessitate careful planning and the involvement of parents to achieve the planned objectives. To date, valuable preliminary planning has been undertaken which augurs well for the continuation of the program in the upper grades.

THE COGNITIVE PROGRAM : DAWSON PUBLIC SCHOOL

IMPLEMENTATION

The High/Scope model, The Cognitively-Oriented Preschool Curriculum, was continued as a basis for decision-making and development within the program. Both internal and external evaluation, using the High/Scope guidelines and checklists, indicated a high level of implementation of the teaching procedures and content specified in the High/Scope curriculum.

Antagonistic to the implementation effort was an increasing concern over perceived inadequacies in the specified program. These will be indicated more specifically under curriculum evaluation, but generally we are in some agreement with Ann Short's preliminary assessment of this program and other Piagetian based programs and their abstracted emphasis on certain cognitive processes (Early Learning Centre Report 1973, No. 5).

With this perspective the program will be continued in the preschool and introduced into the kindergarten grades. Curriculum preparation with the staff has been ongoing during the third term of 1977 and a program has been developed for implementation in a team situation (three teachers, two part-time aides and two parents at each session) in the first term of 1978. Implementation checks and evaluation/development assessments will continue throughout the year.

EVALUATION (refer to Key Experiences for Cognitive Development, van Leer Report, 1976)

1. CONTENT AREAS

a) Active learning

The program organisation maximised the conditions for active learning, a key goal of the program. The eventual completion of the outdoor area enabled more gross motor activity through more active play.

b) Language

Using work time as an ideal opportunity for discussion, individual planning and response sequences were developed. These provided an ideal form for child/child and child/teacher regularly patterned communication. Particular speech (structural) and communication problems received individual attention based upon consultation with speech therapists.

c) Representation

All forms listed were implemented with an increasing emphasis on verbal and written symbolic forms later in the year.

d) Classification, Seriation, Number concepts, Temporal relations, and Spatial relations

All of these content areas were treated systematically throughout the

teaching sessions but the direct practicing of specific activities was reduced. While these content areas remained a major focus for teacher planning of activities and informing strategies of interaction (observation, questioning, probing, and so on) the abstraction of tasks per se was less important than the provision of activities which facilitated active, meaninful involvement on the part of the child. That is, rather than sorting beads, stones, leaves, toys ad infinitum in the hope of maximising some horizontal decalage, more complete integrated projects were developed within which children might exercise their skills meaningfully, rather than practice educational abstractions. This does not mean an avoidance of setting up instructional activities but that the attempt to practice specific cognitive skills was discarded. In some ways the teaching focus shifted from particular cognitive skills to more generalised cognitive styles. Such a re-evaluation underlies the more fundamental conceptual shift from an interventionist to an interactionist position where superior cognitive performances were not the major concern but rather viewed as a part of a more total developmental perspective.

2. TEACHING STRATEGIES (refer to Strategies for Teachers - van Leer Report, 1976)

Teachers became increasingly competent at applying the various stategies and felt more satisfied with them. In accord with the conceptual shift to an interaction model the teaching strategies used by parents became of increasing concern. Although attempts were made throughout the year to contact and involve parents in strategic ways (i.e. in accord with the principles of the program) the teachers felt constrained by program pressures themselves to such an extent that parental contact became more and more a peripheral responsibility and thus one which was too often sacrificed. This was, in some ways, matched by an increased awareness by parents of the content areas and strategies of the model and a call for information and explanation. Unfortunately this was mostly handled only at an individual level so that no systematic evaluation by parents apart from those sampled for extensive interview (P.E.P.I.) was incorporated into the program organisation. This remains a goal for new emphasis as the program moves into its next phase. For 1978 parents will be involved from the beginning in curriculum planning, implementation and evaluation sessions so that more consistent objectives and strategies might be developed.

A basic aim in developing the program in 1978 will be to maximise parental involvement in a context where certain guidelines will be derived from the model but their implementation will be a matter for constant discussion and evaluation and less emphasis will be placed on the more abstract elaborations of program content.

3. RESPONSE TO THE PROGRAM

The initial interview of parents to determine their expectations of a preschool program provided some indication of preferences. Generally parents ranked social-emotional development above cognitive development. Given that the reverse order is priority for the model, some greater consideration was given by teachers to specific behavioural areas. This was the area of most successful contact with parents. Follow up interviews enabled teachers and parents to develop strategies for attending to particular children. These sessions often involved counsellors and other child care workers, providing some broader perspectives to specific problems and enabling consistent strategies to be developed

and implemented at home, at school and with the other workers.

The early organisation and continuing structure of the program was generally suitable for parents, children and teachers as attendance remained high throughout the year and teachers and parents rated children's satisfaction and performance within the program highly.

The school, in determining that the program should be continued and further extended into the infants' department, has shown its acceptance of and confidence in the program to meet children's needs and provide a framework for teacher development as well.

It is at this point that the model of formative evaluation to be developed should seek as wide a base as possible so that the early curriculum focus might be fully expanded into a program which maximally meets the needs of those involved.

THE HOME BASE PROGRAM : BIDWILL PUBLIC SCHOOL

The 1976 report suggested three lines of development for 1977:

1. Improvement in diagnostic techniques;
2. Enlargement of the community involvement component by motivating others in the community;
3. Closer integration of the program with the host school.

Developments in each of these areas will be discussed in the subsequent sections.

1. DIAGNOSTIC TECHNIQUES

Equipping the Home Base teacher with a set of skills for assessing the needs of families is an important objective in the Program. Part of the effort during 1977 has been directed towards the consolidation of existing awarenesses and the reshaping of educational objectives to fit the pattern of needs which had become apparent through the previous year.

Teacher stated objectives for 1977 were derived from subjective judgements about mothers' earlier responses. The teachers were unanimous in their view that they needed to be more directive, a) in their initial approaches to parents and b) in their presentation of their own roles. Thus they were determined to be more explicit right from the beginning of the year, about the essential involvement of parents in the program. They also felt the need to select some of the curriculum areas to which they would give priority instead of only responding to interests and needs of the parents as they arose. The latter decision implied a sense of professionalism rather than a negation of their expressed objective to tailor each family program to the needs of that group.

The first curriculum option to be given priority was language development. Many parents expressed concern about their children's speech, but this concern more often centred on the children's articulation than on expression or syntax. Second, the area of management or training in social skills, was regarded as a priority for a parent-as-teacher program to be effective. Many mothers expressed failure or lack of confidence in their ability to get desired social responses from their children. So much of their energies were taken up with the question of control that more democratic approaches to enquiry and learning were regarded as impossible.

a) Language development programs

The use of the Laura Lee interactive language program (Lee, 1971) began as a full scale diagnostic process which included every child enrolled in the program. Teachers collected utterances of each child over a number of sessions in as naturalistic a fashion a possible. Some mothers also contributed their own lists, and this served the additional purpose of involving the parent in active listerning to her child. Several workshops were arranged for the teachers to acquire the skill necessary to analyse the utterances, but final decisions were made by two of the program advisors. The Lee diagnostic analysis provides an age stage development chart for the purpose of diagnosing the child's need for a tutorial program. First the utterances are allocated a value according to one or other of the two main categories, sentences and presentences,

and then the sentences are analysed and given points on syntactic grounds. The categories of syntax which are considered critical for the age group 18 months to 8 years are as follows:

- use of pronounds and noun modifiers
- use of personal pronouns
- uses of copula and auxiliary verbs, participles, tense forms
- secondary verbs, infinitives
- negative statements
- use of conjunctions
- interrogative reversals (yes/no questions)
- WH questions

Very few of the Home Base children were found to be at the level of pre-sentences, or to have diagnostic mean scores below the 10th percentile, which is the lower limit on the Lee diagnostic chart. Those who were below this level had severe speech problems and were not considered suitable for the Lee tutorial program. For these children an alternative program which focussed on preliminary speech exercises and increasing the attention span and listening behaviour of the children was developed utilising specialist advice from the Polyclinic's medical and speech therapy staff.

The majority of the children were considered, on the basis of the diagnostic approach outlined, to have reduced linguistic skills. For some of these children attempts were made to incorporate the Lee method into story time.

The two basic techniques in the Lee tutorial method are:

i) the setting up of the desired language model (based on the diagnostic); for example, the use of the present participle, "the boy is running";

ii) the use of the WH question to elicit the structure from the child, not by direct imitation, but by comprehension, e.g. "what is the boy doing?" Answer, "the boy is running".

Any kind of conversational setting, story telling or flannel board narration/interaction, can provide the medium, which should be both naturalistic and motivating.

The initial difficulty was to teach the children "the name of the game", i.e. the sort of response which was expected from the question. The easiest way to establish this was by rewarding them for approximating the correct response at first. Another method was to ask for a direct imitation and then move on to the interactive method when the expectation was established. Difficult as it was for the teachers to alter their conversational style to incorporate the Lee method of interaction, the parents had even greater difficulty in using it in a natural way. Probably the greatest effect of the attempts to implement the Lee language interaction method has been the development of increased analytical listening on the part of both teachers and parents.

Skills of this type which are normally used for short periods in a clinical setting, are not acquired overnight. However, the possibility, once they are acquired, of less intense but more frequent home use of the paradigm, is quite exciting. It offers a model for the mother's

occasional elaboration of her child's language, and it is backed by a structured approach to the acquisition of syntax which makes the user better informed about language and more systematic in its use.

In contrast, emphasis on articulation has been lessened by the use of probes provided by the Country Diagnostic Unit of the Health Commission at Queenscliff, and a developmental scale. When the teacher is aware of faults in articulation which are outside the developmental "norms" the correct sounds are incorporated into sentences, and the parent is encouraged to use models of this type and to provide encouragement rather than criticism. One contributing factor in articulation errors is the lack of an adequate model. The involvement of the parent in the modelling as required in the Lee method offers opportunities to improve a possibly inadequate model. Mothers who participated in utterance collection were often surprised to find out what their children were actually saying.

b) Parent Perceptions of their Roles - Revised Form

The revised Parent Perceptions of their Roles (PPR) was used in the pretest as a diagnostic and again in the posttest as a measure of change in parents' views of their own methods and their successes in controlling or managing their child's social behaviour.

In the revised format 10 situations or contexts have been selected from the 1976 model on the basis of diversity of response to that item. It had been thought that the factors in Emmerich's (1969) study were not emerging because the contexts were all important. In the new version each of the ten contexts was the source of five different statements based on Emmerich's styles of control (van Leer Report, 1976:202). Thus the parent was offered each of the alternative styles of control for each of the situations. The possibility existed that some parents would find some of the contexts to be non-problematic, i.e. the child performed as desired without the parent's effort because training had been achieved earlier. That alternative was offered from time to time. It was possible also that some behaviours by children might produce such strong reactions in parents that anger might be the only possible outcome. The instruction was that the interviewer should record such reactions, but that the parent should be asked to repond to the other alternatives as well. If a parent had never tried one of the suggested lines of behaviour it was difficult for her to know whether it "worked" (second part of the question). This question was made hypothetical.

In spite of the exhaustiveness of the new question pattern, a factor analysis performed on the pretest data did not yield Emmerich's theoretically postulated styles of control. Factor loadings were similar to the ones obtained in 1976. This result suggested that the population at Bidwill was dissimilar to Emmerich's. It was suspected that the factor loading on positive verbal negotiation behaviours (inclusive of some of the modelling, reinforcement and reasoning items) suggested the influence of the media in nominating the socially expected response, to some extent at least. More revealing were the reactions to the 'it works' statements.

Teachers found this interview of moderate diagnostic value, since their own interactions with the parents had already given them the kind of information the interview recorded. More helpful as a diagnostic and treatment tool was a programmed series of questions and statements about family situations, which was strongly behavioural. Parents identified in the manual the behaviours which were present in their own families, and accepted the behaviourist interpretations fairly well. The alternatives offered to them by means of positive reinforcement were generally well received because of their practical nature. More difficult was the appreciation of the need to vary reinforcement schedules according to the child's response patterns.

However, the PPR was useful as a pre and post test measure, and the interview itself opened up many opportunities for raising issues of social development with parents. A preliminary presentation of the results appears in the Research Activities section (p. 42).

c) The Eight Block Test

The Eight Block Test has possibilities as a diagnostic instrument in a home teaching program, because it identifies interaction patterns between mother and child in the testing/teaching situation. The context of the interaction is specialised (cf van Leer Report, 1976: 203) and may not be representative of much of the day to day interaction between parents and children, but it does reveal some of the strengths and inadequacies of the parent-as-teacher self concept, and techniques. The methodology provides some problems in the view of both teachers and testers, but even this aspect of the test is revealing. The chief problem is that the discovery method of teaching outlined in the protocol is not necessarily the mother's best style. The teacher is required to use it as standardised procedure for the initial step, teaching the mother how to sort the blocks. It is assumed that one reason for using a discovery method with the parent is to avoid supplying labels for the critical features, i.e. labels which may not be appropriate for the family milieu. Idiosyncratic labels vary from family to family. The emphasis in the instruction is that the mother or father need not follow the teaching pattern modelled, but can choose whatever method she/he wishes. Both teachers and tester felt that a large proportion of the mothers ignored the instruction and used the modelled teaching method, albeit inadequately, when a more direct teaching approach would not only have been more natural, but more effective. The likelihood that this would be a common occurrence in the pretest was not unanticipated because parents might feel inadequate as teachers in the early weeks, and may not be sufficiently comfortable with the experimenter. The re-occurrence of this phenomenon during the posttest was surprising. It suggested that some mothers had not acquired a confidence in themselves which would survive the anxieties of the test situation and were still copying the teacher.

However, other findings were of greater interest for diagnostic purposes, and some of these were the global measures with which Hess (1966) supplemented the analysis of message units. Unfortunately the lengthy time taken in coding the language tapes lessened the impact of this test for diagnostic work. The posttest is in the stage of analysis.

Bearing in mind the reservations held by the High/Scope Educational Foundation (1974:104) the exploratory use of this instrument has been a valuable one. It has enabled the teachers to focus on the essentials for explicit message giving and has provided a basis from which studies of communication skills can acquire some contextual meaning.

2 & 3. THE ENLARGEMENT OF THE COMMUNITY INVOLVEMENT AND THE INTEGRATION OF THE HOST SCHOOL INTO THESE ACTIVITIES

This heading incorporates the second and third suggested developments for 1977 because they have occurred together. The process has been one of evolution rather than sudden change. The steps will be outlined briefly below.

a) Causal in the development in all its aspects, has been the acceptance by teachers of the need to organise and make effective, group activities for parents and children. The former group has consisted only of mothers to date, although fathers occasionally attend special meetings.

The structured play groups (van Leer Report, 1976:134) were not initiated until the end of the first term. Part of the reason for this was the intrusive effect of pretesting in the early weeks, but the teachers also wished to have time to get to know both mothers and children before launching into group activities. Careful attention was given to preparing the structure of the meetings which occurred fortnightly for each of the two groups. Teachers worked in teams of two, sharing the responsibilities of child activities, parent discussion and supervision of the students from Shalvey High School who shared in the care-taking and the learning situations. Some mothers were reluctant to come, but of these a few changed their minds after a single attendance. Others never took the opportunity to find out what the groups had to offer them, and these were thought to be mothers who stood to gain the most from a group contact. The situation exemplified the dilemma faced again and again by the Home Base teacher, of hitting on a method of motivating a mother who might have had a life long experience of failure in school, or in society generally.

Out of the parent discussions grew an awareness on the part of mothers, of their own powers to mobilise resources for one another.

b) One important outcome of such discussions has been the evolution of S.H.E. - a self help establishment for women in Bidwill who needed someone to talk to, about any topic. Many women were frustrated in their attempts to meet the demands put upon them by their role in the nuclear family. Often the frustration was compounded by the husband's unemployment and dissatisfaction with his own life style. The Principal of the Bidwill Public School made available to S.H.E. the premises used for play activities by Home Base, at a specified time each afternoon. The teachers and parent coordinators provided some basic furniture and attempted to create a pleasant corner for conversation. After a public meeting which was chaired by one of the mothers and with the support of the teachers and the community, a roster was drawn up to make a 'hostess' available each afternoon. Response to the publicity has

been immediate, although the numbers have not been large, and the news media has provided an account of the service for local readers. Unfortunately, the summer vacation arrived before adequate plans could be made for the period when the school would be closed, but sufficient encouragement has been received to make this venture a promising one for 1978.

c) The Bidwill Public School has been active in implementing community involvement on at least two new fronts this year -

i) Interaction between high school students and primary school pupils in sixth class. These sessions have centred around personal development, sport, hygiene, first aid and sex education. High school pupils have been invited to attend some sessions.

ii) The appraisal of the school took an unusual form this year, consisting of panel discussions concerning the needs of the area and the response of the school to these needs. Home Base teachers were involved in some of these discussions and the preschool also provided a developmental film and discussion for parents for one of the sessions. The film and discussion centered around the contribution of play in early childhood to intellectual development.

A copy of the program for the appraisal (see p. 29) shows the range of the panel discussions which involved community personnel as well as members of school staff.

d) Other interactions are too numerous to describe in detail. They include discussions with other organisations about future developments of family services in Mt. Druitt, contributions to the planning of network systems elsewhere, participation in inservice sessions for cross-disciplinary groups interested in community involvement, and participation in seminars on the topics of prevention of social problems in childhood, and the provision of child care.

e) While not classifiable as direct community involvement, the language workshop run by the program advisor for interested mothers, is expected to have some interesting outcomes for parental involvement. Mothers were invited to attend the workshops either because their child had language difficulties, or because the mother herself wished to be involved in language activities in the classroom, when assistance was required. Two mothers from another preschool attended these sessions and there is a demand which warrants a follow up in 1978 at various centres. Topics included the development of syntax and articulation, the functions of speech in social contexts, and communication skills.

BIDWILL PUBLIC SCHOOL APPRAISAL

SUGGESTED PROGRAMME

TUESDAY 29/11/77

HOW IS PUPIL PROGRESS EVALUATED?

1. Testing Procedures
   a) Class Testing
   b) Standardised tests
   c) Application of Testing information.
2. Promotion of Pupils
3. Social Development

WEDNESDAY 30/11/77

9.15a.m. SCHOOL AND COMMUNITY

WHAT HAS BEEN THE SCHOOL'S INFLUENCE ON COMMUNITY DEVELOPMENT?

FILM: Parent Discussion Groups.

1. Community Organizations
2. Bidwill Bulletin
3. Sunday School, Churches

11.30a.m. TO WHAT EXTENT DO PARENTS SUPPORT THE SCHOOL?

1.30p.m.

What is being done to foster a "Whole School" concept?
(i.e. Pre-school, Infants, Primary, Secondary as one school).

2. Communication between the school and the community.
3. Within-school communication - Teacher - Teacher
   Teacher - Pupil
   Teacher - Parent
   Teacher - Para - Professionals
   Pupil - Pupil
4. Training in Communication

Time to go home

PART C

RESEARCH ACTIVITIES

IN 1977

INTRODUCTION

The major research activity in 1977 was the collection of data to evaluate the effectiveness of each of the five different preschool programs. As has been outlined in previous, 1975 and 1976 were years in which the programs were developed and implemented. Nineteen seventy-seven, the evaluation year, saw the settling down of the programs and the teachers and aides were fully conversant with their program objectives, teaching styles and organisational patterns. Hence, it is believed that the evaluation was carried out on programs that were operating according to their pre established descriptions.

At the beginning and end of the year data was collected on measures of cognitive development, perceptual development, language, pre-reading and mathematics skills and processes. All of this data collection was done on an individual basis and represented countless hours of testing. However, because of the nature and length of the tests that were employed, the children were not placed under any strains as a result of the testing. It is worthy of comment to note how quickly the anxieties of the children had dissipated after the original session and how accustomed they became to the presence of the research assistants. Indeed by the end of the year newcomers to the programs felt disadvantaged when they were not included in the testing program. Such a situation is obviously dependent upon the qualities and abilities of the research assistants in the testing situation and it cannot be stressed too strongly that only extremely competent and personable research assistants should be employed for such a task.

During the year the teachers and program assistants gathered data on a wide variety of topics ranging from parental roles, expectations and child socialisation practices, to classroom process data collection using trained observers and videotapes. In addition, independent visitors who came to see the Project were asked to evaluate the programs against their stated objectives and to make subjective comments on the activities that they saw occurring in the programs. All of this data had to be reduced to a form that would permit easy processing and this task has been in progress since the beginning of the year.

In addition to the measures that reflect program characteristics in the behaviours and perceptions of child, teacher and parent, data was collected on other referants who were not directly involved in the Project; e.g. a group of children of the same age who lived in an adjacent suburb, but were of comparable socioeconomic status. This group of children were to be used as a control group and were recruited by asking parents to volunteer their children to be used as the control group. Early in the year we became aware that parents and children who formed this group were not truly representative of the area; mainly, we believe, because they had volunteered in the first place. The task of getting a randomly selected control group who would be willing to co-operate with us was not logistically possible and in effect the designated control group became a de facto treatment group through the increased attention that was paid to the children. While such a situation is not desirable from a research viewpoint, the time devoted to

testing this group should not be seen as time wasted, because the feedback of information that was provided did prove useful to those parents by making them more aware of particular aspects of their child's development. The general attendance of all children in the Kindergarten classes in 1978 will enable a randomly selected control group to be selected for comparison with the preschool children at the beginning of their Kindergarten year.

Medical data on a sample of the preschool children was collected by the medical staff of the Polyclinic during the year. The comprehensive examination of the children was complemented by the children's complete medical histories supplied by the parents. The latter information was cross-validated through the examination of the hospital records relating to the birth of the child whenever it was possible to obtain such information. The medical data will be used to correlate specific information with observed school performances as the children pass through the higher grades. We are extremely grateful to the active involvement of the Health Commission, particularly the staff of the Mt. Druitt Polyclinic, in this aspect of our work.

Unfortunately one aspect of our data collection which had to be postponed during the year was the collection of data from the parents about their children's nutritional intake. Previous experience has suggested that if such data is to be of any use, the data collection must be as comprehensive as resources permit. Unfortunately the nutritional group at the University of Sydney resigned, and subsequently we were not able to obtain professional advice from other community nutritionists to guide our further studies. We are hopeful that we will be able to follow up this aspect of our evaluation activities in 1978.

As has been indicated in the preface, it is our intention to publish comprehensive evaluation papers during 1978 which will present the results and analysis of our data collection in 1977. However, brief interim reports on a few of the instruments follow.

LANGUAGE DATA

During the year, data was collected within the theoretical framework established last year. We wanted information on how well the children could understand language and how fluently they could use it. All aspects of language competence and performance can be assessed from data now to hand (see diagram below).

	Receptive	Productive
Vocabulary	Circus I	Language interview
Basic Syntax	Comprehension	Imitation production
Elaborated Syntax	-	Language interview

The basic syntax test was the central measure being used, although its relationship to other measures will be looked at carefully. Data was collected on 130 children in the pretest and 120 in the posttest. Some descriptive analyses done on pretest data revealed the following findings:

i) There were no overall differences between any of the five programs and the control group.

ii) Children enrolled in morning sessions did as well as children enrolled in afternoon sessions.

iii) There were no differences between boys and girls on total scores on two of the subtests (imitation and production).

iv) Girls performed significantly better on comprehension than boys. At present, the reason for this result is not clear.

v) Children who did well on the basic syntax test, tended to do well in the vocabulary test.

While these results are interesting in themselves, other ways of viewing the data seem to have more immediate pay-off for teachers in the classroom context. The test results gave a clear indication of areas of syntax that are still being developed by the four year old child. When the items on the test are ranked for difficulty by pretest scores, the following scale results.

Language

Items Ranked According to Difficulty

Easiest

1. The boy is sitting/The boy is not sitting
2. The girl pushes the boy/The boy pushes the girl

3. The bird is flying/The bird will fly
4. The cat is climbing/The cat climbed
5. A cake/Some cake
6. The sheep is jumping/The sheep are jumping
7. His dog/Their dog
8. The boy draws/The boys draw

9. The cat is chased by the dog/The dog is chased by the cat
10. The boy shows the cat the dog/The boy shows the dog the cat

Most difficult

Items ranked 3-8 on the scale were those in which the children showed only a partial mastery. On items 1 and 2, a near perfect mastery was demonstrated, while on items 9 and 10, minimal control was shown. For the preschool teacher interested in drawing up reasonable developmental objectives for the children in her care, items 3-8 should provide the core of the program.

The results then indicate that the system of plurals, for both nouns and verbs, verb tenses, pronouns and concept words are realistic areas for preschool teachers to concentrate on eliciting from children in day to day interaction. Verb tenses, in that they assist children in their productive use of language, seem to be an excellent starting point. Mastery over the tense system means that the child is not bound to the present, the here-and-now in conversation, but can recall past events and express expectations about future ones.

The test required the children to use the structures in different ways i.e. in imitation, production and comprehension. Results showed that performance in imitation and production was highly correlated so that these two tasks can be seen to be complementary. The implication of these results for the preschool teacher is that modelling of grammatical structures by an adult followed by an elicitation of that structure is the type of interaction suited to developing grammatical production skills in children. Constant use in a dialogue setting seems to be a method suited to preschool conditions. If the child does not respond to such an activity, imitation, representing a lower degree of control over a particular structure should be used as a criterion task.

In 1978, we would like to examine more closely the purposes for which a child selects and uses language in different everyday contexts. The possibilities of exploring this aspect of language use and its functional interpretation have been explored in 1977 and adequate research methods formulated. It is hoped that speech samples will be collected from a variety of contexts in 1978 and the purposes to which children put language will be examined. The relationship of these purposes to naturally occurring linguistic structures will be analysed.

THE PRESCHOOL OBSERVATION SCHEDULE

One of the areas for assessment that was outlined in the original evaluation program of the Project, was that associated with the systematic collection of information about children's behaviours in the classroom. Frequent measurement was regarded as vital because, over the length of the Project, if this information were not obtained, there would be no continuous record of progress for all children apart from the process observation by trained observers which, by chance, may miss some children. The Preschool Observation Schedule was designed to gather such information.

However, these behaviours were not value-free. One justification for intervention was the argument that preschooling is beneficial and that any changes in children's behaviours would be for the better. It was felt that certain behaviours needed to be encouraged. These behaviours were included in the preschool objectives. Teachers expressed the need for evaluation and feedback on the success or failure of the achievement of these objectives. So an essential purpose of the

Preschool Observation Schedule was to record any change in children's behaviours over the year.

Since the November and December data are still being collated and have not yet been analyzed, use will be made of the patterns of results which have emerged in the months of March and July to illustrate how change may be detected.

Overall, by July, teachers across the four preschool sites rated children's behaviours in the following manner: the children were answering questions appropriately; they were working to complete an activity; they were expressing interest in set tasks; they were planning and preparing for tasks; they were participating in group activities; they initiated new activities without assistance; they waited turns; they shared materials; and they followed classroom rules and procedures. A broad label that might be used to classify most of these behaviours, is competence. The children were competent in their preschool environment and were work oriented and skillful in their control of their surroundings.

Teachers saw very few of the following behaviours in July: children withdrawing when approached by an adult; children disrupting activities; children fighting with other children; children staying near the teacher and seeking physical contact; children expressing dislike of activities; children making unnecessary demands for attention, assistance or recognition; and children needing reassurance when attempting tasks. Most of these behaviours reflect the reverse side of the competency coin. To the teachers, the children appeared well-adjusted to and comfortable in the preschool by July.

PARENT EXPECTATIONS - PERCEPTION INVENTORY (PEPI) REVISED 1977

WHAT WE DID

A revised form of the inventory, PEPI 1977 (see p. 37), was used as the basis for parent interview-discussion at the beginning of the year in February, and again in October. Parents of a sample of children at each of the five sites were contacted and the response rate was high (February >90%; October >80%) which evidenced their interest in the information the inventory was intended to gather.

Again open-ended probes/discussion starters preceded the inventory itself, but the context of the interview was altered to maximise dialogue, such that it was more than an isolated procedure and was located in the context of the parents' particular interests. Because of this parents responded with increased openness, compared with the 1976 administration, and the length of the discussion increased to about 30-40 minutes. The change in the format meant that parents were able to initiate questions of their own, to be answered.

It was decided to facilitate this discussion of schooling among parents further, by employing two preschool parents (mothers) to conduct the October interviews. This meant that the information gained from the discussions was available to parents through their representatives and

P.E.P.I. Pretest/Posttest 1977

.... what would you say were the most important reasons for sending your child to preschool? How has preschool affected your child?

	Expectations	Perceptions
to learn what things are for		84.4
to concentrate on things (tasks)		68.7
to listen carefully		77.1
to play, mix better with other children		77.1
to learn to understand instructions		92.7
to follow directions	>90%	54.2
to communicate easily		76.0
to be able to talk about how s/he feels		54.2
to be able to explain things		87.5
to learn to speak clearly		55.2
to ask questions for information		81.2
to learn to count things		84.4
to assemble things, beads, thread jigsaw		77.1
to learn to match things		92.7
to predict the outcomes of actions		67.7
to learn about time		58.3
to learn left from right		40.6
to know colours		81.2
to sing songs, say rhymes		91.7
to learn to remember things		72.9
to make plans		62.5
to learn to get attention the right way		38.5
to take care of belongings		49.0
to share things		69.8
to become less distractable		49.0
to become well coordinated		57.3
to be self controlled		57.3
to be cooperative with adults		61.5
to be confident		82.3
to cope with frustration		47.9
to finish things, tasks, puzzles		65.6
to 'read', look at books	>80%	76.0
to copy letter shapes, write name, words		67.7
to know sizes, bigger, smaller		92.7
to learn how to work things		70.8
to make up own stories		62.5
to play imaginatively with toys		62.5
to be less disruptive with other children		40.6
to be independent	>70%	71.9
to be less shy with other children		52.1
to organise games, play with others		53.1
to be curious		65.6
to be less anxious		36.5
to be less argumentative		22.9
to be less dependent on mother		76.9
to learn to catch things		40.6
to dress self	>60%	31.2
to draw pictures with a lot of detail		62.5
to be less shy with adults		43.7
to toilet self		19.8
to climb		38.5
to feed self		14.6
to play make believe games	>40%	65.6

P.E.P.I. Pretest/Posttest 1977

... how do you think your child is developing

	Parents		Teachers
	Pre	Post	
knows what things are for	95.9	97.9	92.3
knows sizes; bigger, smaller	96.0	96.9	96.6
can assemble things	91.9	91.8	93.1
is curious	96.7	96.9	81.9
toilets self	93.5	96.9	99.1
can climb	91.9	94.9	92.2
understands instructions	96.7	97.9	96.5
reads/looks at books	92.7	92.8	78.5
feeds self	97.5	99.0	85.3
sings songs, says rhymes	91.9	92.8	77.6
remembers things	93.5	98.9	86.2
asks questions (for information)	92.6	94.9	76.8
communicates easily	87.8	92.8	76.8
counts things	82.1	94.8	81.1
can catch things	80.5	88.7	87.0
plays imaginatively with toys	83.7	92.8	68.9
independent	87.9	92.8	87.1
cooperative with adults	80.5	86.6	91.4
can get things to work	88.6	82.4	81.9
can match things that are the same	87.9	94.8	93.4
confident	82.1	89.7	73.3
asks for stories	87.8	83.5	55.5
speaks clearly	87.0	90.7	84.5
shares things	84.5	93.9	90.5
well coordinated	87.0	91.8	87.9
follows directions	84.6	92.8	90.6
plays make believe games	87.0	87.6	76.8
*concentrates on things	74.8	86.6	83.7
listens carefully	70.7	76.3	75.0
dresses self	79.6	86.6	76.7
argumentative	78.9	76.3	23.2
*knows colours	78.1	91.7	90.5
makes up own stories	74.7	75.3	51.7
gets attention the right way	74.8	76.3	84.5
*talks about how s/he feels	65.0	75.3	58.6
*takes care of belongings	66.7	78.3	81.0
*finishes things	66.7	79.4	89.6
*can explain things	61.8	81.5	61.2
*tantrums when frustrated	65.9	54.7	19.9
*can predict outcomes of actions	69.2	81.5	62.1
easily distracted	61.0	66.0	41.4
self controlled	68.3	75.2	84.5
shy with other children	34.2	30.9	33.6
*knows letters of the alphabet	26.8	49.5	23.3
*draws pictures with a lot of detail	37.4	49.5	45.7
*copies letter shapes	41.5	72.2	48.3
disrupts play with other children	43.1	41.2	17.2
prefers to play alone	32.6	23.7	27.6
organises games, play with other children	58.6	62.9	62.9
shy with adults	51.2	55.7	38.0
anxious	58.5	55.6	43.1
understands about time	45.5	53.6	69.0
*knows left from right	36.6	52.6	26.8
plans, thinks how to do things first	52.0	54.6	79.3
dependent on mother	52.0	43.3	22.4

* more than 10% change

provided some distancing from the school and teachers so that communication might be minimally influenced by conventional or expected responses. This again increased the length of interview (up to 60 minutes) and resulted in quite frank responses by the parents.

The discussion and inventory ratings provided some guide to parental expectations and perceptions both for individual children (identifying sometimes particular 'problem' areas) and of schooling generally (preferred methods of instruction, content, discipline and so on).

WHAT WE FOUND

OPEN-ENDED EXPECTATIONS: reasons for sending children to preschool

* Parents most wanted opportunities for contact with other children so that their children might become less shy, more confident, and better able to co-operate with others.

* The thought that preschool should facilitate children's cognitive development and make some start at skill teaching.

* Preschool resources - facilities, equipment and trained teachers with new ideas and different skills were considered important.

* The slow ease into the schooling environment was expected to be an important preparation for infants' school.

* Some doubts about the possible effects of preschool were expressed (might not work out; child might be too young to cope with separation; five days might be too many at this age).

OPEN-ENDED PERCEPTIONS

Parents thought preschool brought about increased social competence as children played together more happily and co-operated to get tasks completed, with reduced aggression and were generally more independent.

As well, parents considered their children had learned a range of school related skills - were interested in stories, listened to instructions, were able to handle equipment more competently and so on.

Parents of home-based children strongly felt their children had gained a positive attitude about going to school and to the tasks of schooling.

At the end of the year parents were again asked what they thought the important objectives should be for a preschool program. They reiterated their earlier emphasis on objectives relating to social development and preparation for school and felt that in fact this had been achieved.

DEVELOPMENTAL INVENTORY

At the beginning of the year parents were very positive about their children's abilities. Few were seen as very shy or disruptive although most were considered quite argumentative. Many were likely to tantrum when frustrated and were easily distracted.

Mothers learn "the communication game" with their children

Over the year children were rated as having improved in all skill areas and exhibiting reduced 'problem' behaviour.

The changes most obvious to parents were children's increased figurative skills in naming and copying letter shapes. They were also better able to explain themselves. Certain behavioural styles had also changed; for example, the children talked more about how they felt, finished things they were doing and were less likely to tantrum when things went wrong.

Generally teachers agreed with the order of significance made by parents at the end of the year although they rated most attributes and skills at lower levels than did parents.

WHAT EFFECTS PRESCHOOL HAD (EXPECTATION PERCEPTION INVENTORY)

Parents rated a range of social behaviours)co-operation, compliance) and many cognitive/academic skills (communication, explanation, counting, prediction, and so on) as the most important things preschool should effect.

Although most ratings of the effects of preschool were below what was hoped for, they never the less remained quite high and priorities were mostly met. Cognitive/academic effects were the most significant. Parents noticed unanticipated gains in drawing skills and increased independence of mother as a result of preschool. They found that their children did not learn to follow directions as comprehensively as they had hoped, nor had they developed some of the communication skills they thought important. Some disappointment over the lack of influence preschool had over conforming behaviour was expressed.

WHAT MIGHT IT MEAN?

Parents are well aware of the detailed aspects of their child's development and have a fairly coherent set of expectations about the effect they want preschool to have. Parents' and teachers' perceptions of the children's competencies are very close. During the year certain priorities alter as parents react to their child's increasing competencies and as they evaluate the practices and content of the preschool curriculum. Teachers, too, alter their objectives and strategies in reacting to new perceptions and the growth of the children.

It would seem, even from these early group observations, that parents and teachers need to come together to re-evaluate their aims and aspirations in light of preschool practice and its effects, both intended and unintended.

Educators' highly prized objectives are worth much less unless shared by parents and children. Constant dialogue will be needed to alter old priorities and practices in light of new evidence for both teachers and parents.

Some notion of the parents' assessments of the worth of the programs comes from their indication of whether these programs should continue into the infants' school.

Many said "NO", that such programs should have a much more solid teaching base so that strong academic and disciplined bias occurs. Many said "YES" but with increased academic and discipline emphases.

At the beginning of a new phase these priorities need to be considered for incorporation, or rejection, but certainly only after closely examining issues and evidence together.

MATHEMATICS

The complexity of the scoring and coding of the battery of tasks set out in Table 1 makes it imperative that any general comments shall be related to the analysis of the data which will be written in 1978.

Although attempts were made to standardise the testing procedures as far as possible so that the different testers were all using the same approaches, the danger to be avoided was the loss of spontaneity in the games situation. Interpretation has been made more difficult by the use of the clinical method of testing. A few of the items (double seriation, division, and number and times correspondence, see Table 1) have been interesting to administer, but they are not regarded as reliable sources for pre and post test analysis. Therefore, it is intended to treat the analysis of the mathematics at two levels:
1) the pre and post test items, which will provide evidence of change;
2) the developmental information from the data which has been derived in a less systematic manner. There are few precedents in the literature for the study of children's logical and pre-logical behaviour at pre-school age and so some of the outcomes were unexpected. Techniques have been evolved for dealing with some of the administering of the tasks which were difficult to score and to interpret. Experimentation in 1978 should take a more in depth focus on a number of items and vary the complexity of each subproblem more systematically. At this age level gestures and the syntax of actions must be assessed since the verbal explanations are not only lacking in clarity, but are often absent altogether. It is quite a difficult feat for the tester to maintain a games atmosphere while making notes about the child's actions and also recording his statements. With a smaller number in the experimental sample it might be possible to have an observer in the room whose attention would be directed solely to the systematic recording of the required information.

PARENT PERCEPTIONS OF THEIR ROLES (PPR)

General comments about the PPR were made in the Home-based program report. Preliminary analyses of the pre and post test data shows that the changes did not follow the pattern which would have been predicted from Emmerich's study. A summary of the percentage differences in pre and post test items is given in Table 2 (p. 44). The table lists the statements which showed the greatest change, and this was discernible in the frequency with which mothers rated themselves

TABLE 1 Mathematical games used to evaluate mathematical knowledge

Classification:	What we are looking for
Toys	grouping actions
Environmental objects	grouping statements.. they are all etc.
Multi-attribute blocks	basis of grouping
	number in groups
	exhaustiveness of groups
Seriation:	
Series of 6	spontaneous seriation or provoked
Second stepped series of 6	type of error
Interweaving series .. 12	recognition of end points
Ordination of two series	final N correct
	compensation for displacement
Seried pattern (abacus style):	
Description	critical or salient features (e.g. colour of arrangement)
Reconstruction	getting stuck in a perception
Strategy	felxibility in error correction
Measurement:	
Length of straws, absolute	comprehension of dimensional language
comparative	ability to make comparisons
Straw and string equivalence	control of curved and straight lengths
Tower building: equal baseline	use of units (blocks)
unequal base	awareness of end points
	awareness of incongruity
Division:	
Prediction of methodology	awareness of spatial configuration
Actions in solving problem	systematic approach to problem
Recall of actions	memory of own action
Accounting for correspondence of number and actions	prediction and testing prediction
	accountability
Number and motion correspondence:	
Carousel game:	control of motion
free play	awareness of continuity vs. discontinuity
money for trips	recognition of unit of motion
carrying out number instruction	ability to represent unit of motion
	ability to reproduce units of motion
Spatial	
Reproduction of linear order	copy of pattern, copy of action
One to one correspondence	conservation of correspondence
Hidden arrangements (blocks)	memory for spatial order

50

TABLE 2 Home Base Program

Changes in Parent Perceptions of their Roles, 1977

Item statement	% of total responses (N=47/46)				
	I am like this			It works	
	Never	Some-times	Mostly	Mostly	
I explain to him why it's good to keep his things tidy and look after them.	14 11	39 26	47 61	27 46	Pre Post
We don't have arguments at bed-time because he goes anyway without a word from me.	63 2	23 22	14 76	25 78	Pre Post
I tell him how good he is when he's all tucked up in bed.	39 30	22 17	39 52	(16) 55 (37) 52	Pre Post
He never mucks up when we're visiting if I leave him to his own devices.	6 9	53 30	41 61	47 63	Pre Post
Shopping: I get him to help me find the things we need, so that he'll enjoy going shopping.	14 9	23 13	63 78	76 85	Pre Post
Fighting: I try to set an example by not getting angry myself.	27 26	49 44	24 30	16 26	Pre Post
Showing off: I just don't provide an audience for him or talk about him in his presence.	26 28	29 24	45 48	43 61	Pre Post
I get them to share by telling them how nicely they're playing.	35 15	30 39	35 46	33 54	Pre Post
They can see we share things in the family and so they copy us.	14 9	31 20	55 70	41 50	Pre Post
I always encourage him to do things the way he wants so he doesn't need to contradict me.	53 37	33 37	14 24	22 39	Pre Post
I find it hard to keep him from being restless at home unless I keep telling him what to do.	49 48	27 33	24 17	76 61	Pre Post

Situational categories:

Caring for things
Helping in the house
Going to bed
Visiting
Shopping
Fighting
Showing off
Cooperating; sharing
Contradicting
Getting bored

Styles of control:

Modelling

Reinforcement

Reasoning

Situational modification

Non-intervention ... autonomy
Just asking

as being like this "most of the time", and also finding that "it worked". The items vary, that is, they do not reflect consistent changes in styles of control. Some items suggest a move towards greater autonomy of the child, and others suggest that some mothers are learning to inhibit their reactive behaviours in the direction of reducing their previous reinforcement of negative behaviours on the part of the child.

TEACHER OBSERVATION OF PARENT AND CHILD (TOPC)

TOPC records have been made on a monthly basis for the greater part of 1977 (cf van Leer Report, 1976:204). Some items show change over the early months (later records have not been analysed). The measures in TOPC are recorded in terms of frequencies of occurrence of certain behaviours in the specified home visit. All judgements were subjective attempts at proportional assessment of frequency. Thus a child might be observed to be excitable very little of the time and co-operative most of the time, with the teacher, but the reverse might be the judgement of his interaction with his parent during that session (see TOPC score sheet, p. 47). One example was the change in parent-child interaction between March and June. Results show that parents increased their listening and watching behaviour over the period but they also increased their 'uninvolved' behaviour. In June there was still a fairly low percentage of encouragement, praise and reward, directed to positive behaviours by the child. Mothers did not increase the frequency with which they identified problems or suggested solutions during that period, but they tended to follow the teacher's suggestions more frequently. They were also most receptive to suggestions about the child.

In contrast, the TOPC shows that between March and June the teachers increased the amount of encouragement they gave directly to parents, they made more suggestions, but they also listened more often to what the mother was saying. Although they questioned more often they did not use more opportunities to extend the mother's conversation.

Changes in child initiated behaviour from March through June were:

i) elicited response from mother by a variety of means,
ii) received acknowledgement from the teacher more often,
iii) 'starred' more often with mother and teacher,
iv) listened and watched less often,
v) elicited attention by word more often (both mother and teacher),
vi) questioned teacher more often,
vii) commanded mother more often,
viii) co-operated more often with both mother and teacher,
ix) interacted verbally with the teacher more consistently, and to a lesser degree with mother,
x) play materials were the focus of interaction only about 25% of the time with teacher (June) and 10% of the time with mother (same month),
xi) no change was observed in the happiness of the child vis à vis the teacher (40% of the time) over the months, but an increase of this affect was observed vis à vis the mother over this period.

Since the teachers have commented on seasonal changes in interactive patterns through the year, the complete set of data is necessary before any general trends can be inferred which might be attributed to Home Base treatments or curricula. However, the TOPC serves as a commentary of the PPR, which reflects the parent's self-perceptions.

TEACHER OBSERVATION OF PARENT AND CHILD (TOPC)

Instructions:

The teacher will make these observations monthly with each family. Scoring shall be done immediately following the interview. Several behaviours within any given category may occur during one interview, thus leading to multiple scoring, but the teacher is expected to give prominence to the behaviour which occurred most often. Thus the child may initiate some of the time, but also withdraw. The most typical behaviour (most frequent) for the session will score the highest.

Since attention will be given at times to mother and at times to teacher, categories will be scored twice in the child/adult section. Sometimes the behaviour will appear undirected, e.g., talk, task orientation or intentional behaviour may be general rather than specifically for a particular adult. On the other hand there may be only minor differences. It is thought that both columns should be scored in each case so that any discrepancies may be recorded.

Behaviour which occurs infrequently shall be scored under 1, frequently under 3, the middle score occurring at 2.

Child/Adult

	Parent			Teacher		
1. Initiates	1	2	3	1	2	3
by word	.	.	.	.	.	.
by gesture	.	.	.	.	.	.
resulting in new game	.	.	.	.	.	.
adult involvement	.	.	.	.	.	.
adult assistance	.	.	.	.	.	.
acknowledgement	.	.	.	.	.	.
Stars	.	.	.	.	.	.
Listens or watches	.	.	.	.	.	.
Resists						
by withdrawal	.	.	.	.	.	.
by verbal aggression	.	.	.	.	.	.
by physical aggression	.	.	.	.	.	.
drawing attention to other	.	.	.	.	.	.
passively	.	.	.	.	.	.
2. Talks						
questions	.	.	.	.	.	.
makes personal statement	.	.	.	.	.	.
informs	.	.	.	.	.	.
mandates	.	.	.	.	.	.
answers	.	.	.	.	.	.
3. Task oriented						
cooperates	.	.	.	.	.	.
distracted	.	.	.	.	.	.
works on other	.	.	.	.	.	.
disrupts	.	.	.	.	.	.
not involved	.	.	.	.	.	.
4. Focus						
physical contact	.	.	.	.	.	.
materials	.	.	.	.	.	.
verbal contact	.	.	.	.	.	.
5. Intentional behaviour						
fantasy	.	.	.	.	.	.
convergent	.	.	.	.	.	.
divergent	.	.	.	.	.	.
work	.	.	.	.	.	.
motor	.	.	.	.	.	.
6. Affect						
happy	.	.	.	.	.	.
excited	.	.	.	.	.	.
passive	.	.	.	.	.	.

Child/Child (focus child is observed)

7. Style of interaction	1	2	3
aggressive	.	.	.
leads	.	.	.
cooperates	.	.	.
competes	.	.	.
resists	.	.	.
withdraws	.	.	.
ignores	.	.	.

8. Child talk	1	2	3
starts conversation	.	.	.
egocentric	.	.	.
comments on	.	.	.
asks about activity	.	.	.

Parent/Child

9. Main focus	1	2	3
caretaking	.	.	.
listen/watch	.	.	.
show/tell	.	.	.
controlling	.	.	.
permissive	.	.	.
passive	.	.	.
withdraws	.	.	.

10. Mother talk	1	2	3
questions	.	.	.
extends child	.	.	.
mandatory	.	.	.

11. Parent response style		1	2	3
positive:	encouragement, enthusiasm	.	.	.
	praise/reward	.	.	.
	provision for needs	.	.	.
	positive physical	.	.	.
negative:	ignores	.	.	.
	criticises	.	.	.
	rebuffs	.	.	.
	neutral	.	.	.

Parent/Teacher

12. Extent of openness to teacher	1	2	3
play alone	.	.	.
suggestions for mother	.	.	.
suggestions re child	.	.	.
obstructs:			
by context	.	.	.
by resistance	.	.	.
by talking	.	.	.

13. Mother as learner	1	2	3
questions	.	.	.
identifies problems	.	.	.
makes suggestions	.	.	.
follows suggestions	.	.	.

14. Mother's affect	1	2	3
anxious/self	.	.	.
anxious/child	.	.	.
pleased about gains	.	.	.
likes company	.	.	.
doubts	.	.	.
criticises	.	.	.
self-absorbed	.	.	.
passive	.	.	.

15. Context of learning

which room/s _____

lesson goals _____

_____

_____

_____

time spent _____

materials taken _____

unusual happenings _____

FUTURE DEVELOPMENTS

The introduction to this report reflected upon the changing ethos of the Project. Nineteen seventy-eight, which marks the beginning of the second phase of the Project's activities, is the time at which thoughts and aspirations need to be translated into realities through close collaboration with teachers, school administrators and parents. Fortunately there is a well established legacy of co-operation between the Project and the schools and their communities which will facilitate the development and implementation of the programs in the higher grades.

Nevertheless, the task will not be easy as we do not have the lead-up time that we had at the beginning of the Project's activities. The task of developing the programs in situ without the benefit of discussion and reflection away from the demanding pressures of on-going classroom teaching, is not an easy one. The expressed goodwill and professional attitudes of all involved should lighten the load considerably and create an atmosphere wherein educational experimentation can flourish.

In addition, the Project's staff has to synthesize their experiences over the past three years in a way that will assist both the professional educator and the parent in the provision of quality educational experiences. For no matter what the published evaluation results describe as having happened in the various pre-school programs, there is no doubt that the children and their parents in the area have appreciated the efforts of all involved in the Project in trying to provide high quality educational programs for children. It behoves the Project staff to facilitate the transmission of such an ideal in a way that will continue to achieve this objective.

PS011544

FOURTH ANNUAL REPORT
TO
BERNARD VAN LEER FOUNDATION

January, 1979

PROJECT STEERING COMMITTEE

Professor R. Seddon	Macquarie University, Acting Chairman
Mrs A. Bevan	N.S.W. Department of Education
Mr R. Turner	The Smith Family
Dr J. Harley	N.S.W. Health Commission
Mr J. Braithwaite	Macquarie University, Field Director

PROJECT STAFF

Project Director:	Professor Hugh Philp
Field Director:	John Braithwaite
Program Assistants:	Jim Alexander Jillian Belme Anne Gray Muriel Healey John Metham
Research Assistants:	Barbara Ashford Anne Clark
Secretary:	Marilyn Fraser

PROJECT SCHOOLS

School	Principal	Infants' Mistress
Bidwill	Mr M.Hardes	Mrs L.Thomas
Dawson	Mr I.Feneley	Mrs J.Putland
Madang Avenue	Mr J.Eddington	Miss D. White
Mt Druitt	Mr D.McIntosh(Terms 1,2) Mrs F.Lopo (Term 3)	Mrs M.Jagoe
Whalan	Mr D.Macauley	Mrs J.Watson

List of Teachers

Dawson Infants

Teachers: Sandra Clifford
Margaret Collins
Maria Howe

Madang Avenue Infants

Teachers: Alison Davies

Mt Druitt Infants

Teachers: Jenny Chiswell

Whalan Infants

Teachers: Peggy Townsend
Jeanette Booth*
Joyce Petty*
Lyn Garland

Bidwill Infants

Teachers: Theresa Taylor
Phil Bradbury
Sandra Neale
Christine Steames

*
Left during 1978

ACKNOWLEDGEMENTS

The continued assistance willingly given by many individuals and agencies is once again gratefully acknowledged. The extent of such assistance has, if anything, been even greater as the impetus of community involvement gained momentum during the past year. Major evaluation sessions took place twice, requiring the co-operation of children, parents, teachers and school administrators. Co-operation and assistance were forthcoming wherever and whenever requested.

The successful implementation of project programs has only been possible because of the professional and personal contributions of the children, their parents, the teachers, school principals, infant mistresses and educational administrators in the N.S.W. Department of Education and for their co-operation we are extremely grateful. University colleagues have, as usual given support and guidance which is highly valued by project personnel. Officers of the Health Commission at the Mt Druitt Polyclinic and students and staff in a postgraduate nutrition course at Sydney University made it possible for extensive data to be collected on some additional aspects of child health and nutrition, which would otherwise have been impossible.

Several publications of the Project's activities appeared during 1978, providing detailed information about the implementation and evaluation of some aspects of the preschool stage of the Project. We again thank the Bernard van Leer Foundation for their continued support in this second phase and look forward to the culmination of all our activities in the final year of the Project, 1979.

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PREFACE

This fourth Report to the Bernard van Leer Foundation highlights the activities of the Mount Druitt Early Childhood Project during 1978. It contains summaries only of the Project's activities during 1978 and does not contain any results from the comprehensive evaluation studies that were carried out during the year.*

The detailed evaluation of the Project's activities in the first phase of its existence is currently being completed. In essence the findings support the value of preschool education for disadvantaged children and emphasise the valuable roles parents play in their children's education.

Further, the results suggest that while differential results were found among the five programs, there were few program differences of any importance or significance.

* Readers who are interested in these publications should either contact the Project directly or consult the appropriate references in the ERIC system.

1. Reading activities at Whalan School

PART A

GENERAL ACTIVITIES OF THE PROJECT IN 1978

INTRODUCTION

The implementation of the five different programs was continued with the same cohort of children in their Kindergarten year of schooling. In many ways this undertaking proved to be quite a different task to the preschool year and involved almost a 'new beginning' rather than simply a continuation of a familiar pattern. The reasons for this are many and complex and are discussed in detail in the following sections.

Invaluable experience has been gained in the area of parent and community involvement in schools, with some exciting breakthroughs having been made as all the parties concerned came to realise what could be achieved and how it could be achieved in practice. Naturally a certain amount of trial and error is required in such a new mode of operating and many adjustments were found necessary on the part of parents, teachers and administrators. It is to be hoped that our experiences will prove useful to others considering similar ventures.

The continued existence of programs after the withdrawal of direct Project involvement was able to be observed in the 1978 Preschool classes. The extent to which the programs adhered to their original objectives and methods varied from school to school and the factors which appeared to be influencing this were carefully monitored and are discussed in a later section.

PROJECT MANAGEMENT AND PERSONNEL

Members of the Field Committee, Chaired by Mr Hal Boyd, had the responsibility of guiding the Project's activities at the local level. Their experiences within the Project since its inception enabled the Committee's members to develop a broader perspective (concerning the Project's goals) that they had not possessed initially. Suggestions were made and proposals assessed confidently with the knowledge of what had and had not been successful in the past.

Due to the growth of the Project's scope and activities the Field Director withdrew from active participation in the schools and an additional Program Assistant was appointed to replace him as adviser at Madang Avenue School. It will be appreciated that the difficulties associated with coming into this position halfway through the Project, at a time when the significant transition from Preschool to "formal" school was being made (see later discussion), were considerable and it was entirely due to the skill and

enthusiasm of the new appointee that the program in that school was successfully implemented.

Unfortunately the 1978 teachers did not have the benefit of an extended period of release from teaching duties to allow them to undertake a special training period for their roles in the Project due to factors beyond the Department's control. Consequently all training had to be "on the job." The teachers did not therefore have the same opportunity as the original teachers to find out about the programs at other schools nor to develop as strong a sense of being part of a team, beyond their school affiliation.

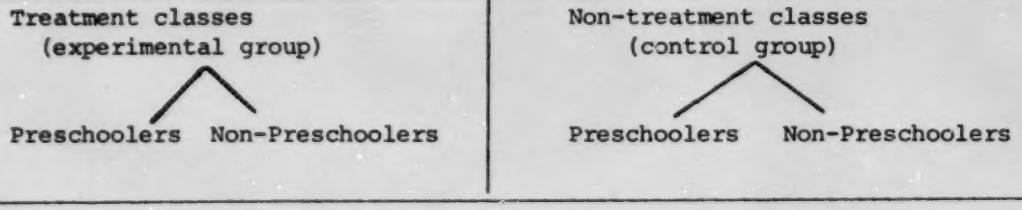
It is a tribute to all concerned that despite the aforementioned difficulties, all programs were successfully implemented and progress achieved. Regular inservice days were held to share evaluation information, project developments and general information. A few unavoidable changes in teaching staff took place during the year but special efforts by Project staff and continuing teachers ensured that the changes took place smoothly.

PROJECT DEVELOPMENTS

There were two major aims determining activities for 1978. Firstly, each of the five approaches was to be applied to developing a program for Kindergarten. Secondly, the experimental Kindergarten classes following these programs contained both children who had attended the Project preschools and children who had not attended any form of preschool at all. It was necessary to select a new control group of "non-preschoolers" because it had become obvious that the original group selected for control purposes in 1977 was heavily biased in terms of the characteristics which determined whether or not parents volunteered their children for this control group in the first place. The reasons for this are discussed more fully in other Project publications. It was therefore possible at the end of the Kindergarten year to compare preschoolers and non-preschoolers in both experimental and non-experimental classes. See Figure 1.

FIGURE 1

MAJOR COMPARISON GROUPS 1978



a) CURRICULUM DEVELOPMENT

Some programs had strong implications for a Kindergarten curriculum in terms of both content and method. The Cognitive, Competency and Behaviourist programs, drawn as they are from a strong theoretical framework, lent themselves well to application and extension. Home-base and Contemporary programs, however, had less direct implications. The Home-based programs in fact could not operate as such as there is no provision for this educational model (beyond preschool) in N.S.W. The program at this school, therefore, concentrated on parent involvement as a dominant feature. The Contemporary program, embodying the main features of Australian preschool programs (which had always operated as, and been seen as a quite separate entity bearing no direct relationship to what followed in formal school) had far less direct implications for a Kindergarten curriculum than the other programs.

b) THE CHANGE FROM PRESCHOOL TO KINDERGARTEN

Whereas the preschool classes had been a new addition to the schools at the time the Project started, Kindergarten classes have operated over a long period of time in N.S.W. and were already accepted as an integral part of the Infants' School. The effects of this difference on Project involvement were both good and bad. Change in any well established activity will often be viewed with suspicion and at least require justification. Whilst in one sense this need for justification was an added burden for Project personnel, it also ensured that all programs were thoroughly planned and executed. An additional factor was the presence of "ordinary" Kindergarten classes (all preschool classes were experimental) allowing observers to make continual comparisons. This was increased by the sharing of lunch rooms etc. by all teachers. On the whole, what happened in the experimental Kindergarten classes was much more closely related to and observed by the schools within which they operated than the preschools had been. Whilst this increased working pressures at the time, it also ensured that once programs were accepted and seen to be successful, they would be continued when Project staff eventually withdraw. The need for the co-operation of all concerned was highlighted by such close contact.

We would like to thank the Headmasters, Infants Mistresses, teachers and parents who required us to justify what we were doing and then gave their support and co-operation to enable the implementation of the programs for these children.

c) CONTINUATION OF PROGRAMS IN PRESCHOOLS

Project staff officially withdrew from the preschool programs to devote their attention to the Kindergarten programs. There was the opportunity at some of the schools, however, for occasional meetings or informal discussions between Project staff and preschool teachers. Where this happened the programs were found to have continued virtually unchanged. The most extreme changes were observed at a school where several changes in staff had occurred and the Project staff member was actively discouraged from visiting the preschool class. The viability of programs would seem to depend largely on the attitudes of the teachers and administrators concerned. It is anticipated that more attention will be paid to the question of long term viability in this, (1979) the final year of the Project in the hope that at least some of the programs will continue after we withdraw.

d) DATA COLLECTION

It was necessary, once again, to devote considerable time and effort to evaluation activities. This comprised pre-testing at the beginning of the year (Boehm, PPVT, Circus Maths and Social, Murphy Durrell Reading Test), post-testing at the end of the year using these same measures and additional testing and surveying at the end of the year in the areas of maths, language and parental opinions. The PROSE and KRS (Kindergarten Rating Scale) were used at various times during the year to monitor processes within the classrooms.

Despite the large numbers of children to be tested and the formidable number of tests to be administered, both major testing sessions were completed within a three week period each, with a minimum of disturbance to the normal classroom routines. This was largely due to careful planning and training of testers by Project staff and the willing co-operation of teachers and schools.

e) NUTRITION SURVEY

A group of Sydney University post-graduate students, under the guidance of Dr. Ian Darnton-Hill and Mrs Sue Stuckey, conducted a series of parent interviews to study the children's total food intake over a two day period and the children's regular eating habits. The parents interviewed were those whose children had undergone extensive medical testing by Dr Eira Haskard of the Mt Druitt Polyclinic, as part of the Project's activities in 1977.

The results of their study indicated that

i) Mt Druitt children are healthy.

ii) there is a greater incidence of "fast food" intake than is desirable.

iii) adequate quantities of vitamins etc. are eaten.

iv) there is some irregularity of meal times.

Individual reports, adequately detailed and making sensible recommendations regarding children's diets and eating habits were sent to the parents of the children studied.

A detailed report of their findings is included in Part C, page 87. It was a pleasure for Project staff to be associated with such a well organised and thorough survey.

DEMONSTRATION AND DISSEMINATION ACTIVITIES

Visitors from various institutions observed the programs during the year, at which times the opportunity was taken to explain what we were trying to do and to obtain critical feedback. Several groups of student teachers and student aides visited the schools as part of their courses.

Project staff presented papers at Conferences and lectured to Teachers' College students about Project activities.

The following discussion papers were published during 1978 and copies may be obtained upon request to the Secretary, Mt Druitt Early Childhood Project, Macquarie University, Sydney.

i) "Home-Based Preschool Programs - a viable alternative" by John Braithwaite and Muriel Healey.

ii) "Evaluation of Mathematical Thinking" by Muriel Healey

iii) "Teachers' Ratings of Preschool Children's Behaviours" by John Metham

iv) "Parents Expectations-Perceptions of Preschool (PEPI)" by Jim Alexander

v) "Technical Report on Project Measures"

These papers discuss research findings of components of the evaluation model of the Project's activities. They contain valuable information for teachers and educational administrators alike.

Some of the invaluable experience and expertise of our staff, gained at least partially through working with the Project, was able to be put to good use, e.g. Muriel Healey's invitation to visit Western Samoa to investigate a request to ORT (Organisation for Rehabilitation through Training, Geneva) for financial assistance from the Preschool Association there.

Other invitations accepted by Project staff included:- Advisor to the evaluation unit of the Family and Children's Welfare Services Agency (Jim Alexander), Secretary of the Child Education and Media Sub-Committee of the International Year of the Child National Committee of Non-government Organisations (Anne Gray), member of the Future Lobby Committee (Jill Belme) and member of the Program Committee for the triennial Conference of the Australian Preschool Association (Muriel Healey).

The project continued to receive publicity in national publications and radio presentations and a request has been received to make a series of short radio programs in 1979. Copies of all our papers have been placed in a number of libraries throughout Australia and some have been selected for inclusion in the ERIC system.

At the school level, special booklets were prepared for the parents of children in the experimental classes, to explain the purpose and the nature of the programs their children were to take part in. Excerpts from the booklet for parents at Dawson Public School, where the Cogni'ive Program operates, are included here as an example (pages 8 to 12). It included photographs of the children actually in the 1978 classes, participating in various activities. A regular newsletter was sent to all parents to keep them informed about research findings and developments (some excerpts from these appear below.)

A Regular Newsletter was sent to all Parents.

What benefits do children get from going to preschools?

Undoubtedly the most obvious benefit is better sc
Both parents and teachers reported they co
changes in their children's social be
co-operated with other children

Dear Parents,

For the past three years we have be
valuate the effects of children's att
this we have talked with paren
As well, we have measu
the preschool year.

attempting to
in preschools.
rs and the
n's progress

Newsletter

Should all children attend preschools?

To answer this question is not an easy task. Obviously parental wishes and the abilities and development of individual children have to be considered.
Our results suggest that some children may benefit equally as well by being with their parents.
However, it does appear that the majority of children do benefit from going to
pres

What did the parents think of the preschool programs?

At the beginning o
expectation they
education for th
that they belie
develop socially
dation for later s
ented how independent,
children had become. Fur
previous problem behaviours
half of the parents were able to
learnings their children had acquire
commented favourably on the value of pr
their children.

77 a sample of parents were asked what
t the potential benefits of preschool
The majority of responses indicated
uld help their children to
d should provide a good foun-
of the year parents comm-
nd confident their
mmented that
year. More than
lated
parents
or

Does it matter which preschool program children a

As you know we developed a number of different pro
cognitive, competency, contemporary, behaviourist
based.

erhaps the most forgotten benefit is that preschools pro
he opportunity for children to play with their friends
se a wide variety of existing educational and play equipme
lay is an essential part in childre development as in play
ctivities they practice the skill bits they will need
their later years. Preschools u valuable opportunity
r children to play with their peers.

A Cognitive Early Education Program

Dawson Pre School
Dawson Infant's School
Macquarie University

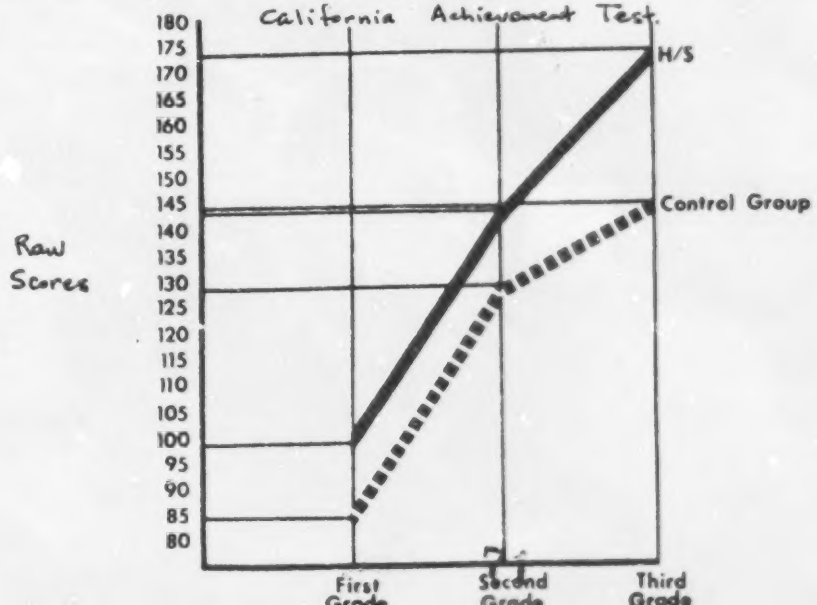
The Program

The Dawson Infant's School has chosen to implement Cognitive preschool and kindergarten programs. These programs have been developed in America by the High/Scope Foundation. This is the first time in Australia that the programs have been used. The N.S.W. Department of Education has approved and supported the scheme and Macquarie University, through a grant from the Van Leer Foundation is studying all aspects of the program. The findings of these studies will be reported and available to parents.

Because the program is new you will be keen to know more about it, to be able to make judgements about it for yourself. It is important that you do know so that teachers and parents can plan and work together with understanding to achieve those goals we sahre for our children.

The High/Scope Foundation has reported on the program in some recent American studies. They found that children who had been in the program scored better on some achievement tests than others, especially in language, maths and science skills.

In the first, second, and third grades, children from the High/Scope Program performed significantly better on a nationally normed achievement test than children who had not been in the program.*



Why is the Cognitive Program Able To Get These Results?

Because the children participate in a daily plan, work, recall sequence.

Because teachers know how to match learning activities to levels of development to do the right thing at the right time.

Because parents are involved.

Plan.... Work.... Recall ...

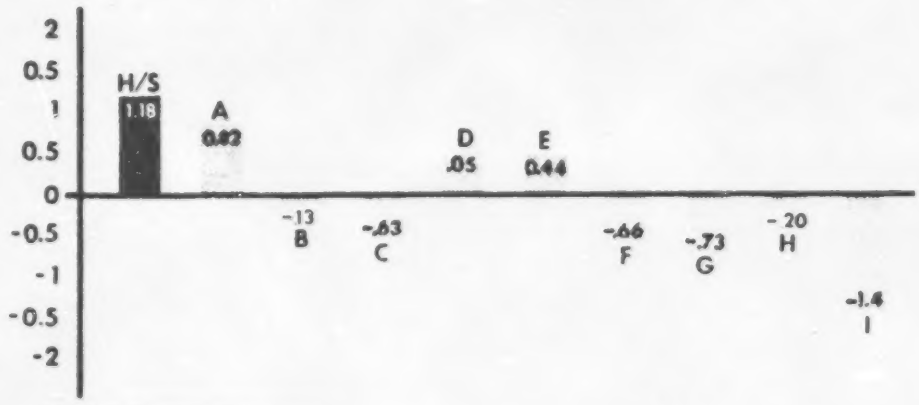
Children learn to plan.

They are helped to do what they have planned.

They represent what they have done, by talking about it, explaining to others, showing others and so on.

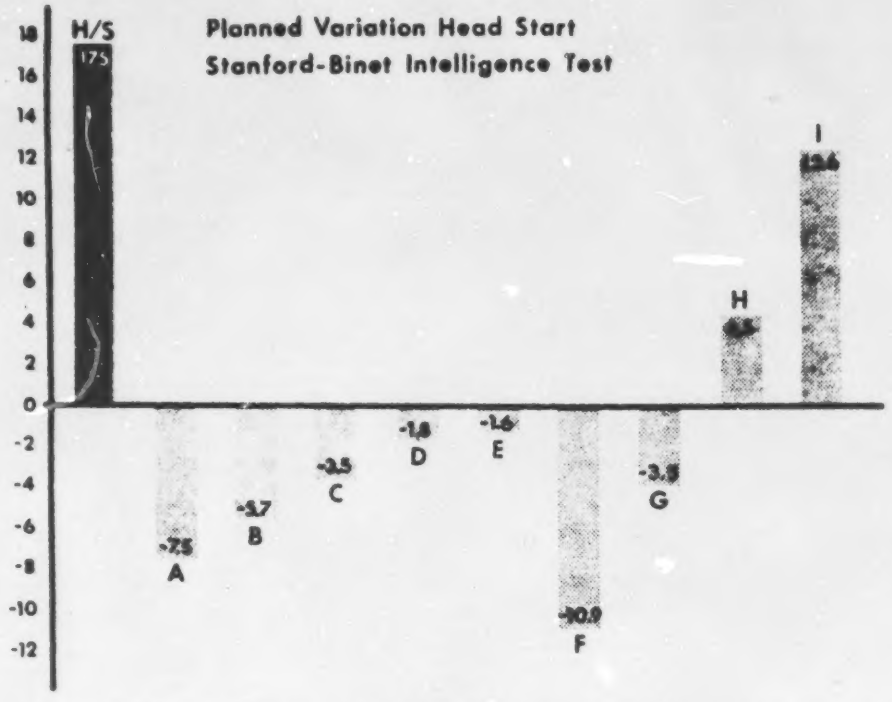
Children from the High/Scope Program were the only ones to score significantly higher on tests of pre-science, pre-math, and linguistic concepts than a comparison group.

Planned Variation Head Start
N.Y.U. Book 3D: Pre-Science, Pre-Math, and Linguistic Concepts



An impartial evaluation* of 11 important preschool programs as implemented in Head Start reveals:

Children who had participated in the High/Scope Preschool Program showed greater gains in general thinking ability than children in any of the other programs.



*Results of the 1970-71 National Head Start Planned Variation Study, reported by the Huron Institute, Cambridge, Mass., at the 1972 Conference of the National Association for the Education of Young Children.

WHAT DO CHILDREN LEARN IN THE PROGRAM?

They learn to think, through active experience with

- real things
- real people
- real places
- real tasks and activities

They learn the beginning skills needed for

- reading
- writing
- maths
- science

They learn about themselves, other people around them and the things around them.

LANGUAGE

Communicating to other children, to adults - about ideas, work, feelings, organisation improving clarity of speech, beginning to learn to read, telling stories, listening, learning new words, describing things with more detail, understanding messages.

SOCIAL SKILLS

growing in independence from adult supervision, getting on with other children and aults, cooperating to get things done, sharing, controlling impulses, increasing confidence.

MOTOR SKILLS

exercising large muscles, developing fine coordination, increasing motor skills.

COGNITIVE - THINKING SKILLS

CLASSIFICATION - grouping things together and regrouping things in different ways, finding similarities and differences, explaining reasons for groupings, naming things, seeing relationships among things (all heavy; all long and red; all curved and short; all have fur; all eat grass and have four legs; all heavy but can float and so on)

SERIATION - ordering things in different ways by size, shape, colour, length, weight, age, pitch, volume, texture, smell and so on.

TIME - knowing about time, order, sequences - which comes first, last, the order in which things come, reversing order, remembering, telling the time, measuring time.

SPACE - seeing ways things are organised, where things are, how they are arranged, where they are kept, how they fit, how to get there, putting them the same way, changing the order.

NUMBER - counting, grouping things of the same amount, number, measuring, weighing, comparing, increasing - adding, decreasing - subtracting, multiplying - making more equal groups, dividing - sharing equal groups.

CHILDREN LEARN TO THINK IF . . .

- they have the right to be active
- they are encouraged to speak
- the materials available to them in the classroom are interesting, challenging
- the adults involved with them work and talk with them and understand their ways of thinking and feeling

We are working to develop this program and hope that you might help us with it.

Your interest and participation and evaluation is crucial in this development.

PARENT AND COMMUNITY INVOLVEMENT IN SCHOOLS

The move from preschool to kindergarten necessitated much careful planning in this respect. Whereas it had always been the practice to have parents assist in preschool classes in a variety of ways, this had not been the case in kindergarten. It was a new and somewhat threatening situation for some teachers to have parents working alongside them in the classroom. The first five months of the year saw some progress and some setbacks in this area but many would see the Inservice Evening for teachers and parents, held in July as a turning point towards an understanding of what parent involvement means and how it can best be achieved.

The aim of the Inservice Course was to cover aspects of parental and Community involvement in schools including i) advantages and possibilities of involving parents in schools; ii) practical examples of activities currently being undertaken in Mt Druitt schools and iii) strategies that can involve schools, parents and communities in worthwhile activities. The program included a film, plenary sessions and small group discussions. Apart from Project staff and administrators from the Education Department, 35 parents and 35 teachers attended. The discussion resulted in the formulation of the following conclusions:-

1. *Parent and Community involvement has advantages for children, parents and teachers: -*

   a) *Children gain greater confidence and security from the better understanding between teachers and parents and increase their skills in social, academic and creative spheres.*

   b) *Parents can get first hand information and gain insights into child development and new teaching methods.*

   c) *Teachers will be more aware of parental expectations and attitudes and will add to their knowledge about individual children. The presence of parents will lower the pupil/adult ratio.*

2. *Parents can help in three main ways:-*

   a) *By working in the classroom with children*

   b) *In day to day school affairs*

   and c) *In school policy making*

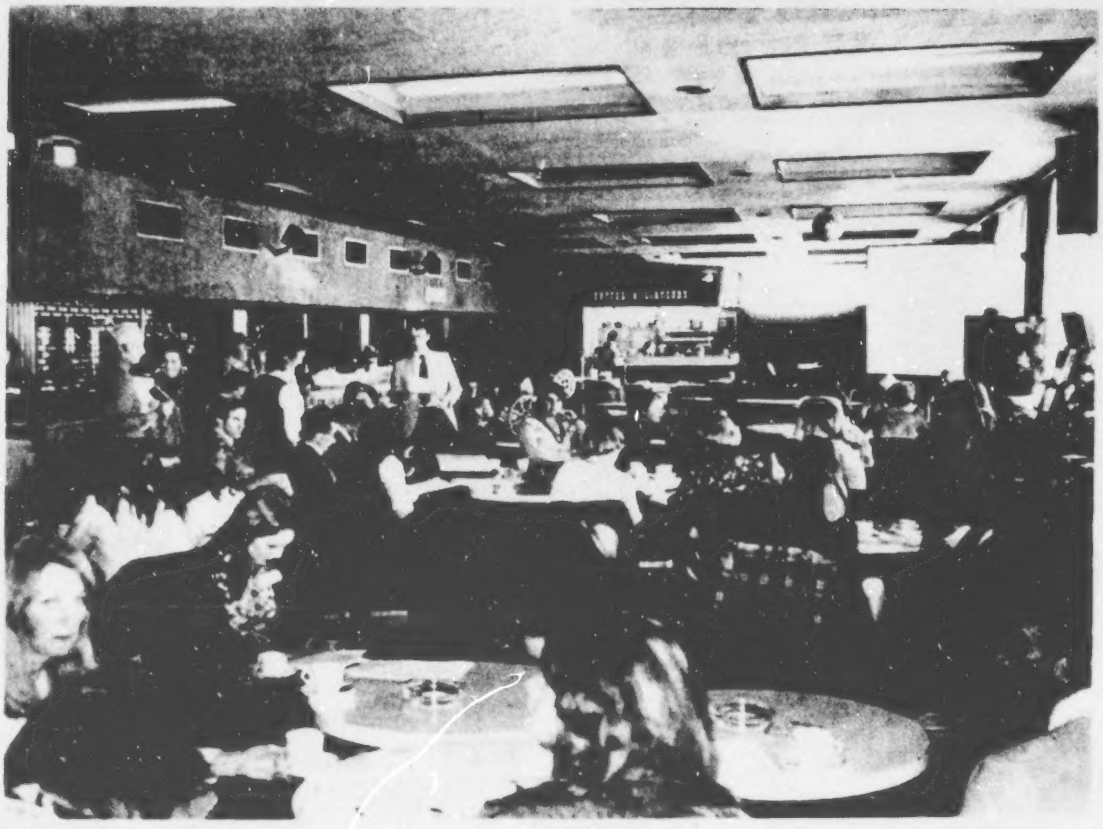
The course was regarded by both teachers and parents alike as informative and worthwhile. Participants stated that hearing different viewpoints, details of activities in other schools and practical ideas for involvement, assisted them to clarify their own views on the subject. The general climate became far more open and parents said they now saw themselves as a legitimate part of the school. Teachers and Project staff worked hard to capitalize on these gains in understanding and many activities grew out of that Inservice Course. Mt Druitt school for example has a regular Wednesday morning Coffee Club for parents and teachers with as many as 100 parents attending. Many have suggested that similar Inservice days and evenings should be held more often and the Project will be working towards this in 1979.

The actual numbers of parents involved and the frequency and nature of their involvement seemed to be influenced more by the degree of teacher acceptance (influenced to some extent by the position taken by administrators) rather than by the willingness of parents to participate. This varied from school to school and Project staff took every opportunity to increase teacher acceptance by providing support and encouragement.

Previously established film groups, discussion groups, high school student interaction programs and personal development courses have been continued quite successfully and new ones commenced.

Recognition of the educational value of parent and teacher collaboration was given most strongly in the decision of the Principal at Bidwill to incorporate the home-based approach in the new preschool to be opened at the Bunyah Road site in 1979. The combination of sessional and home teaching programs offers the socialising experiences desired by the majority of parents for their children and the full involvement of parents in the learning process, the best of both worlds. In addition home-based activities have proved to be a recruiting ground for parent leadership.

Given that kindergarten is an integral part of the school structure the events of 1978 have established a firm foundation for the continuation and growth of such activities in the future.



2. Inservice Course, July, 1978

PART B

PROGRAM DEVELOPMENTS

IN 1978

1. THE CONTEMPORARY AUSTRALIAN PROGRAM IN THE KINDERGARTEN AT MT DRUITT SCHOOL, 1978.

The challenge of 1978 was to devise and implement a follow-through program for the children enrolled in the preschool at Mt Druitt school in 1977. This meant adjusting the program to the routines and customs of the wider school community. Successful implementation called upon the energies and resources of school staff and project personnel. Initiatives taken on both sides resulted in many interesting developments in curriculum practice and community involvement in school activities.

a) THE FORMULATION OF GUIDING PRINCIPLES FOR CURRICULUM DEVELOPMENT

The general principles governing the Contemporary Approach in the preschool were maintained for the program in the kindergarten class. Several meetings were held towards the end of 1977 involving school administrators, teachers and project personnel. Discussion centred around reaching agreement on the basic principles of the preschool program which would be retained. However, it was clear that program development for the kindergarten class would necessarily be influenced by several crucial implementation problems inherent in the structure of the infants school. The two most important were a much less favourable teacher/pupil ratio, and the introduction of program content organised on a traditional basis.

The program and practices of the preschool had been developed independently of school-sanctioned procedures from a set of principles guiding preschool education. Historically, within the Australian setting, little attempt had been made to reconcile preschool and infants school programs. This implied that the programs of infants and preschools were seen as having different emphases. However, continuity of program was essential for curriculum research to be carried out. In this case, it meant a unique solution worked out to cope most adequately with local conditions.

Two factors were taken into account in framing the principles governing the formation of the kindergarten program; i.e. the essential characteristics of the preschool program and the educational policy of the infants school. The views of parents were also taken into account. In informal discussions, parents had expressed pleasure with the preschool program, but now felt that formal, academic training should occupy more of the children's learning energies. Parents thought that learning to read, write and count were important objectives for achievement in kindergarten.

The school policy shared the same central philosophical viewpoint that determined program emphases in the preschool. The 'all-round' development of the child was important, implying concentration on social/emotional well-being and success in individualised activities. In addition, the school policy placed importance on developing good relations with the community. The element it added for the kindergarten was that of a subject-centred curriculum, and a belief that children in Mt Druitt would benefit from the acquisition of academic skills. The school, therefore, had a responsibility to provide experiences which would ensure that the children acquired competence in reading,writing and mathematics.

From discussion of these issues a set of principles which would govern the formulation of the kindergarten program emerged. They were:-

i) that the school experience of children entering the kindergarten class from the preschool should be continuous.

ii) that aims and objectives should reflect current trends and philosophies in Australian education.

iii) that wherever possible, the teaching style and emphasis of the preschool should be preserved in the context of a more subject centred curriculum.

(October, 1977)

Essentially, the structure of the kindergarten program drew its inspiration from the main tenets of the preschool program, in that it would be child-centred and activity based and from school policy which provided for a defined learning curriculum. The teaching style of the kindergarten program, therefore, would as closely approximate that of the preschool as local conditions and restrictions would allow. Continuity of programs was achieved by blending current influences.

b) General Aims & Objectives of the Contemporary Approach for 1978.

Towards the end of 1977 objectives were drawn up for the three groups of people who would be affected by program implementation: the children, the teacher and the parents.

A. Objectives for the Children

General objectives for the children in the treatment group were stated with the guiding principles in mind. They stress the eclectic nature of objectives in the Contemporary Approach. Socio/emotional development is still stressed as a prerequisite for effective meaningful cognitive and academic learning.

The objectives were

1. a) To provide an individualised set of experiences for each child that fosters the development of emotional well-being and personal, social and cognitive skills.

   b) To set up a suitable context for these activities, that is based within the children's own experiences, but is expanded to include new experiences.

2. To cater for the development of each child's creative potential through interaction with materials, adults and other children.

3. To provide opportunities for each child to select and follow through activities independently.

B. Objectives for the Teacher

The central figure in successful program implementation is the teacher. A program such as the Contemporary Approach which emphasises sensitive, often unobtrusive treatment of interactions with young children, requires careful development of the teacher's roles. A meeting late in 1977 elaborated roles suitable for a kindergarten teacher implementing the Contemporary Approach. Valuable roles for the teacher to cultivate were initiator, responder, facilitator and evaluator. For the kindergarten teacher the roles of initiator and evaluator assume more importance than for the preschool teacher.

A specified content curriculum is introduced by the teacher, who initiates classroom and field experiences for the children. In addition, school based evaluation, (as opposed to program evaluation) is required for achievements within the content curriculum. Responder and facilitator are familiar roles adopted by preschool teachers working with the Contemporary Approach.

General objectives for the teacher were drawn up in relation to the roles of the teacher in classroom practice (see Table 1).

TABLE 1 Objectives for the Teacher of the Treatment Group, 1978

	OBJECTIVE	ROLE
1.	To work within an individual perspective of evaluation	EVALUATOR
2.	To carry out skills instruction in small groups or individually	INITIATOR
3.	To encourage parents to be present in the classroom to assist in classroom procedures and to participate actively in the children's learning experiences.	INITIATOR/ FACILITATOR
4.	To create a democratic learning atmosphere in the classroom	FACILITATOR
5.	To create a social environment in which children feel free to converse and argue, and in which co-operation and interaction among children is promoted.	FACILITATOR/ RESPONDER

C. Objectives for the Parents

Parents had expressed their desire to continue participation in classroom activities with their children to both school and project personnel. Objectives for parent involvement emphasised roles that parents could play in the school and classroom, and the services that the school could offer parents.

The objectives were

i) to enhance and widen the skills parents have in interacting with their own and other children.

ii) to inform parents of the content of the curriculum their children are experiencing, and the methods used to achieve curriculum objectives.

iii) to provide parents with feedback concerning their children's personal, social, physical and academic skills and abilities.

iv) to allow opportunities for parents to meet together and discuss school-related and general educational issues as they affect their children.

C. IMPLEMENTATION STRATEGIES

The main problem in implementing the Contemporary Approach in the kindergarten was how the instruction component could be introduced without compromising the child-centred nature of the program. The preschool, with no specific curriculum, could spontaneously build on interests expressed by the children. The kindergarten curriculum could not be child-centred to this extent, since certain skills and knowledge had to be taught.

However, so far as was possible classroom procedures and teaching practices were derived from preschool teaching practices. The program was to be child-centred in that individualised experiences would be provided for the children to follow up in accordance with their own preferences. In particular, the children would be given opportunities to select and follow through activities independently. The importance of free activities in helping the child to become a self-motivated learner was recognised. For the kindergarten year, free activities include a selection of pre-reading, writing and mathematics games as well as creative activities such as painting, collage etc.

Much of the children's day, therefore, would be activity-based. The importance of play in the children's emotional, social and cognitive development was re-affirmed by the program. Children were given opportunities to play out social and personal roles seen in the real world through make believe games, dressing up and home corner.

Because play is a reflection of current personal concerns, observation of children playing is a useful diagnostic tool. This type of diagnosis was used early in the year to identify children who could most adequately cope with school experiences and those who needed additional support to achieve goals.

Space limitations meant that the wide range of activities available to the children in the preschool could not be maintained in the kindergarten on a daily basis. In particular, important activities such as water, sand and painting could not all be available at once. At any time, though, the children had access to a balanced combination of activities designed to develop specific abilities, and to allow for self-expression. The children could further their learning or apply their skills with the more formal activities or they could enjoy the exploration allowed by the free activities.

The adult/child ratio was much less favourable in the kindergarten class than it had been in the preschool. The preschool program was implemented with an adult/child ratio of 1-10, whereas now a teacher/ratio of 1-30 was operative. The children were at school for a longer period of time daily than in the preschool. This was of no assistance to the kindergarten teacher, because her program demands were greater and she was required to do face-to-face teaching all the time the children were at school.

It was obvious that some grouping procedures were necessary and more adults needed in the classroom. Skills instruction was carried out in small groups with activities provided at different levels for different groups.

Initially, groups were formed on a social basis, i.e. the children who wanted to be together went together. Later social groups were formed for mathematics (T.R.I.A.D.) and ability groups for reading. The essential part of program monitoring was the discussion of the individual progress of each child with the class teacher. The ability of the children to learn independently was especially discussed.

The Kindergarten Rating Scale assisted in identifying those children in need of special attention within the different environment of the kindergarten classroom with its new procedures and expectations. The Kindergarten Rating Scale utilises teachers' ratings, which were then organised into six dimensions, which were important program variables.

Dimension 1:	Independence
Dimension 2:	Classroom confidence/control
Dimension 3:	Interest/motivation in classroom activities
Dimension 4:	Language (social interaction)
Dimension 5:	Needs reassurance when attempting tasks
Dimension 6:	Confidence/language ability/academic

The instrument identifes the level of competence each child shows on these dimensions. The program assistant then compiled logs of the interactions that the children participated in over a period of time. From further discussion of these, specific classroom practices were devised to develop the skills necessary to become self-motivated learners.

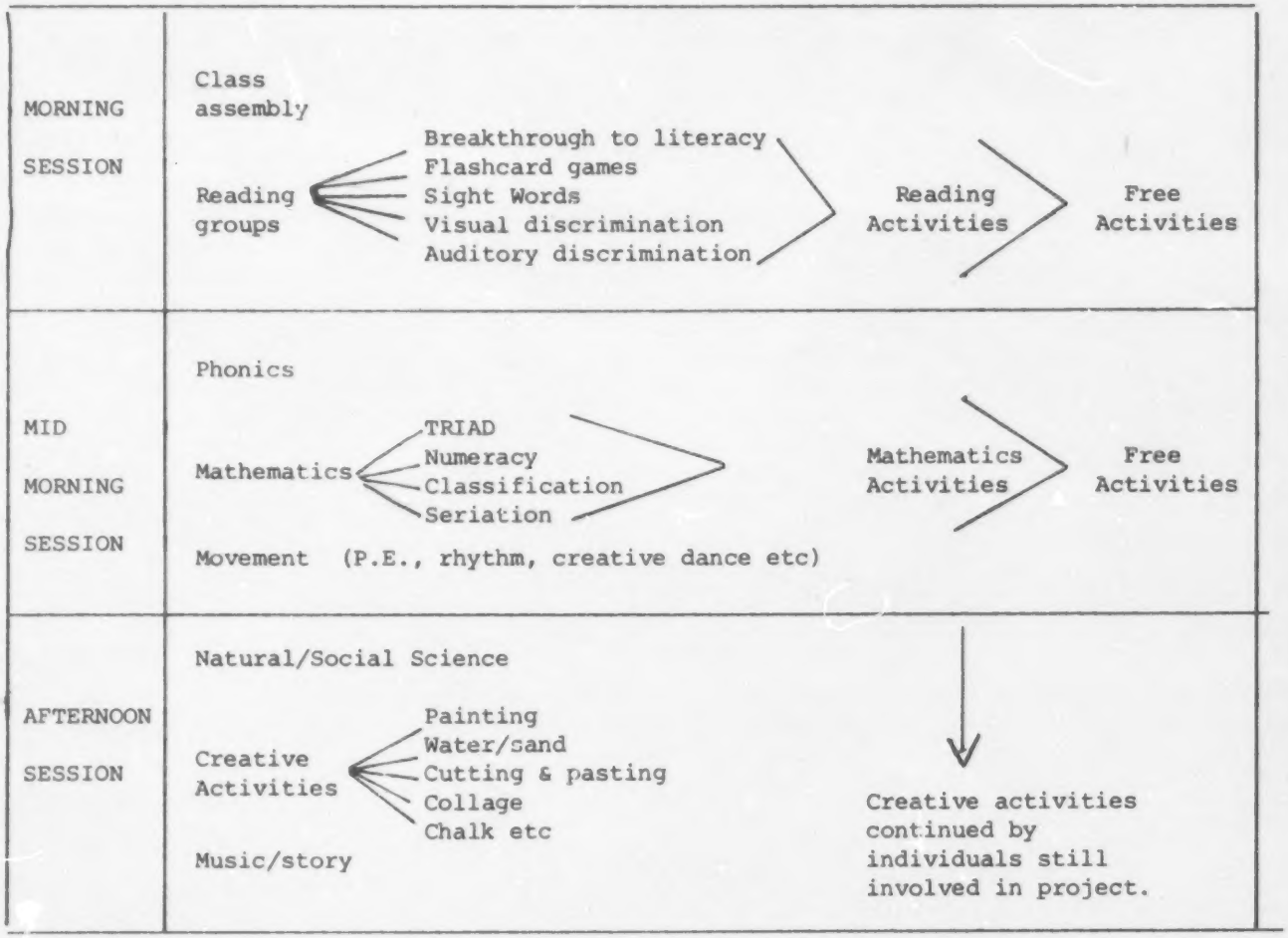
This process proved invaluable in compiling a small sketch of each child's abilities so that grouping and individualisation could take place. Long observations and daily behaviour entries on specific children in program books was not possible for the kindergarten teacher whose energies were completely absorbed by the rigours of face-to-face teaching and planning skills instruction.

The Daily Timetable

Timetabling was made as flexible as possible but it was nonetheless more formal than in the preschool (see Table 2). The subskills of reading and mathematics, for example, required time devoted to them separately. There was a creative period when the children were free to choose their own pursuits in the morning and afternoon and often in the middle period of the day as well.

Groups were used for reading and mathematics. Once the given assignment was completed, children were free to choose their own activity within their particular subject areas, and then move into creative activities. The children accepted this routine responsibly. One of the strengths of the system was that the children could pace themselves at the various tasks to suit their own motivation on that particular day.

TABLE 2 A Typical Day in the Mt Druitt Kindergarten Program



The teacher could prolong or shorten any activity period in the interest of maintaining a high level of motivation. She was also able to be tolerant of individuals who had not finished tasks continuing with them. In this way there was a flow from one activity period to another and minimum time spent in routines of packing up etc.

D) PROGRAMMING CURRICULUM CONTENT

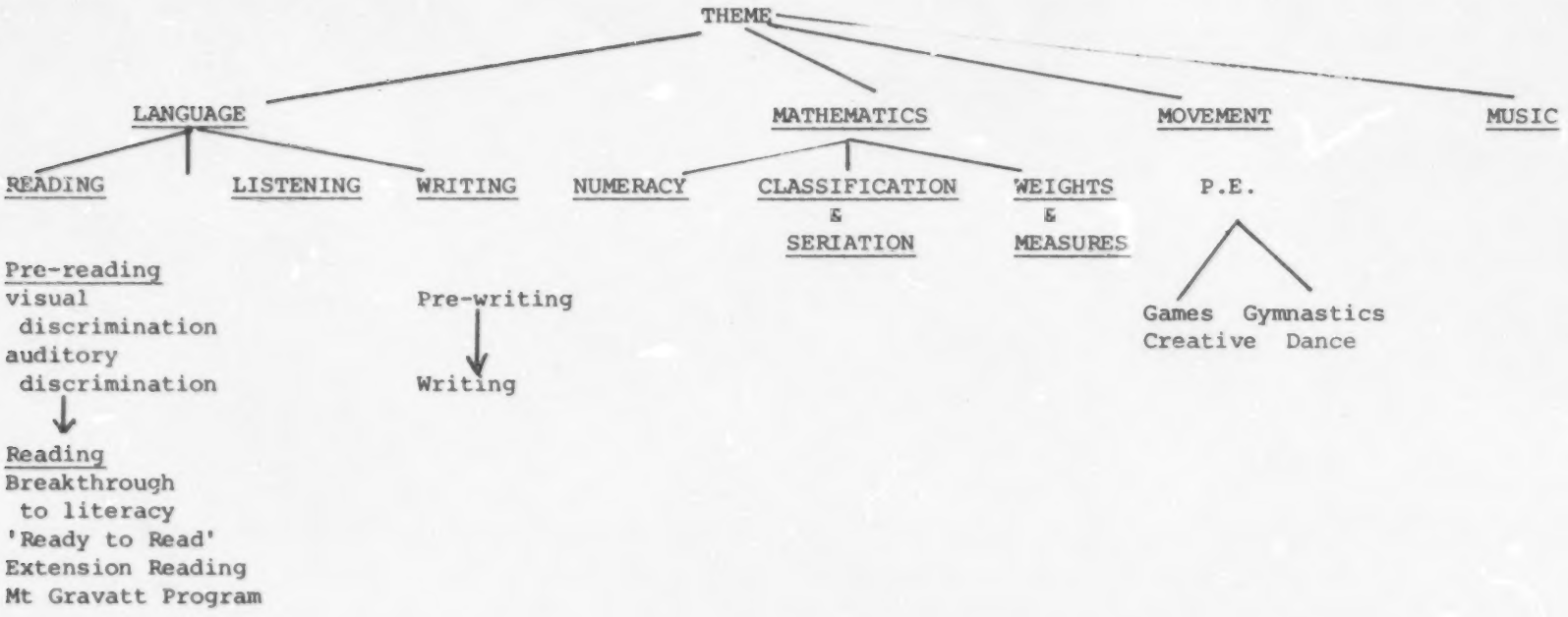
Where appropriate, curriculum content was arranged around a central theme which helped to integrate the various subject areas (see Table 3). The central theme arose from the interests children expressed in the classroom. Sometimes the teacher initiated a unit of study arising from an excursion, or some other significant event. Subject areas such as social science and natural science also provided interesting subject matter that could be developed into a theme.

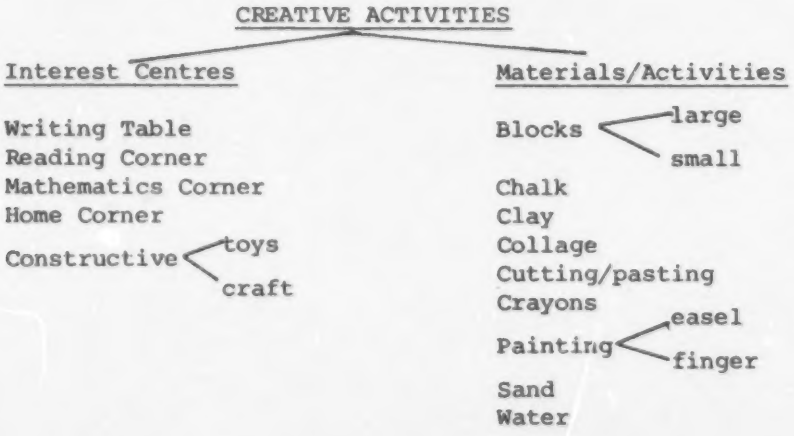
Traditional subject areas were retained and specific activities planned for them. However, there was a great deal of time allowed for the children to develop their own interest with classroom materials, and creative activities were always available for this purpose. Children could approach the teacher and other children for suggestions and assistance.

The Contemporary Program required that a careful balance was kept between formal and creative activities for the attainment of its objectives. The main emphasis for program monitoring in the early part of the year was the determination of this balance. As the teacher and children got to know each other better, and especially as the children's capacity for independent work became obvious, more informality became apparent.

4. Reading Corner

TABLE 3 ORGANISATION OF CURRICULUM CONTENT





The school assumed responsibility for programming the content of the major curriculum areas, reading and mathematics, because the selected programs would continue through the infants' grades. The Methuen series, 'Ready to Read' and TRIAD were chosen for this purpose. Apart from this prescription the class teacher was free to program the rest of the curriculum.

a) READING

The reading program for the kindergarten class included pre-reading developmental activities in visual discrimination, auditory discrimination and excercise in left to right eye movement. Some activities merged into the reading program which was based on Breakthrough to literacy for critical skills training, followed by the Methuen 'Ready to Read' program for basic reading. Supplementary activities to the reading program included extension readers, sight word, caption reading and language games and puzzles. (see Table 4)

TABLE 4: READING PROGRAM OUTLINE FOR YEAR

	Pre-reading Activities	Reading Activities
TERM 1	i) Left to Right eye movement Nursery rhyme charts Pattern copying with beads ii) Visual Discrimination Finding the object that is same/different in an array Watching pictures/sentences/words	i) name cards ii) sight words iii) classroom caption iv) picture/word watching
TERM 2	i) Visual Discrimination ii) Auditory Discrimination Identifying environmental sound Tapping tunes Identifying people from voices iii) Phonics Identifying & recognising single sounds/consonants	i) name recognition ii) caption book reading iii) 'Breakthrough to Literacy' iv) sight words v) worksheets based on Breakthrough to Literacy words
TERM 3	i) Visual Discrimination Advanced Frostig Program ii) Auditory Discrimination iii) Phonics (single sounds/consonants vowels) iv) Language activities - discussions - small group activities	i) Breakthrough to Literacy ii) Board stories iii) Mathematics Basic Reader

b) Mathematics

Sequential development of skills in mathematics was an important objective in the area of cognitive development. An Australian kit, TRIAD, was used to cover the core of the mathematics curriculum. It is a comprehensive scheme including class and group activities and numeracy and concept development.

The group lessons received most attention, because they were better suited to achieve program objectives in developing independent working skills in the children. The middle part of the day included a group activities section for use of mathematics materials. Both formal (Cuisenaire Rods) and informal (everyday objects) materials were used for teaching relation concepts such as longer than/more than, more than/less then, for developing vocabulary and language connected with mathematics.

In addition to TRIAD, supplementary activities were provided in the cognitive areas of classification and seriation. These were given special attention because competence in them is an essential basis for the formation of numeracy concepts and operations, treated more fully in year one. Activities were selected from 'Primary Mathematics Today' by Williams & Shuard.

5. Many different materials were used to teach Mathematical Concepts.

E) PARENT/COMMUNITY INVOLVEMENT

Parents had been involved in everyday, classroom activities with their children in the preschool program and they wished this practice to continue in the kindergarten. In the kindergarten class, because the adult/child ratio was 1:30, parent involvement helped to individualise the program. Parent involvement showed growth during the year and school commitmen' to the community deepened. Forces at work in the school,independent of che program in the kindergarten class,led to other ventures being undertaken.

The earliest efforts at bringing parents into the school involved the explanation of classroom procedures and curriculum content of the kindergarten program. Three workshops were planned in the first half of the year, for this purpose. These were very well attended and provided a forum for discussion of various school related issues. They were followed by keen and prolonged parent participation in classroom affairs.

Workshop I

The purpose of the workshop was to explain the central place of play in the program, and to discuss the role of play in children's learning. The emphasis was on the value of play in the learning of young children. The facilitative roles parents can adopt in their children's learning through play was stressed.

Research that Macquarie University was conducting into the nature of young children's play was discussed, and videotapes shown of Mt Druitt children in various free play situations. Finally, the differences parents could expect in the organisation and conduct of the kindergarten room as opposed to the preschool were discussed.

Workshop 2: Aspects of Reading

The purpose of this workshop was to talk about the ways in which reading is formally and informally taught. The class teacher spoke about reading as a part of classroom life, and as a part of the language curriculum. The aims and materials of the reading scheme used in the classroom (Breakthrough to Literacy) were explained and demonstrated. Parents were invited to conduct reading groups using the materials and both teaching and resource roles were discussed. The program assistants talked about the informal aspects of learning to read that are everyday activities, especially reading stories, understanding the conventions of print, vocabulary expansion and listening skills. It was stressed that incidental learning of this kind in the home was an essential support to school efforts in teaching children to read.

Workshop 3: Talk, Listen, Learn Together

Everyday opportunities for learning in the home were discussed in this workshop. The variety of the home environment, and everyday events as sources of learning experience for young children were discussed. The skills and knowledge of the Home-Based teachers were invaluable in presenting this workshop. They spoke of language and mathematics activities that parents could carry out as a part of daily routine, and demonstrated material that could be easily made from objects found in any household.

These gatherings proved popular and successful for parent attendance in the classroom was secured, and the interest of other school staff members was kindled. The inservice day held by Macquarie University provided a forum for discussion on community involvement, and was well attended by infants' school staff and parents.

Another initiative in community involvement had a wider brief than the participation of parents in the classoom. At the instigation of the acting Principal of the primary school, a 'coffee club' was formed. Space and coffee-making facilities were set aside so that various functions could be held. The idea was to provide a social forum, where members of the community could get together and chat informally. However, to provide interest and a focus for discussion, a guest speaker was usually invited to attend.

As a method of welcoming and accepting parents into the school, the coffee club was a success because it had the support of the whole school staff, and it was always very well attended. People attending the coffee club usually decided on the type of function they would like a few weeks in advance. At the end of one year, a culminating activity, a barbecue, was held. Some of the functions held included a fashion parade, a tea making demonstration (India Tea Centre), and talks on drug abuse, first aid and resuscitation, and legal aid.

In addition to the informal coffee club, plans for 1979 include the formation of several interest groups in various activities e.g. craft, fitness etc. It is envisaged that these would be self supporting and organised by the mothers. It is hoped that parents will be involved in some class activities with primary and infant school children.

F) Program Evaluation

Evaluation in 1978 had two specific aims

i) to provide information from which classroom practices that would achieve program objectives could be developed.

ii) to assess the achievement of individual children within the program.

These aims were not evaluated separately, because they are not independent of one another. Data on children's achievement, for example, was used diagnostically to develop program practices, especially early in the year. There was much formative evaluation that was ongoing and informal during 1978. Discussion on the progress of individual children and the effectiveness of classroom practice for example, were frequent during the year.

A program such as the Contemporary Approach which has its main objectives for the development of the children in the area of socio-emotional growth is difficult to evaluate. Therefore, various tests and measures were administered and the information they provided used diagnostically. These measures will be described and results reported.

1. The Skills Checklist

The checklist which teachers completed in the preschool in 1977 was re-given at the beginning of 1978 so that a summary of each child's abilities could be assembled. Research has shown that children can return from a long vacation less competent and confident in the knowledge and skills they had learned in the previous term. The checklists were given to obtain a baseline of abilities for each child, so that individualised experiences could be devised for them.

Personal/Social Scales

There were 17 items in the personal scale and 9 items in the social scale. Teachers rated on a 5 point scale, such that 0 meant 'Not at all' or 'never' and 4 meant 'is able to consistently'. Means on items of positive value ranged from 3.067 to 3.800 for the personal scale, and from 3.433 to 3.667 on the social scale. On all items, therefore, the groups had maintained competence gained in the preschool. At the end of the preschool year in 1977 similar means were recorded.

The means for the whole scale indicate the level of competence gained on that dimension by the whole group. These scores are presented in Table 6.

On each dimension, the group performed well, indicating that skills learned in the preschool were retained and that a more challenging set of personal and social behaviours should be drawn up for achievement in the kindergarten.

The high percentage of correct answers for all categories shows that as a group, skills and abilities were well retained. Certain common errors occurred and specific competencies could be taught to the individual children needing help with them. These results suggested that more challenging, open-ended learning situations should be devised for those children performing well in the behaviours on the checklist. These were suitable program concerns for the first few weeks of the year. The checklist proved to be a useful formative instrument.

TABLE 6: RESULTS ON PERSONAL/SOCIAL SCALES, CHECKLIST 1978

N = 30

Scale	Item	Mean	S.D.
A. Personal	17	49.233	6.760
B. Social	9	29.533	6.535

Scale	Item	% correct			Comment
C. Perceptual	1. Knowledge of Shape	Names	Matches	Sorts	
	Circle	93.4%	100%	100%	
	Triangle	96.7%	100%	100%	
	Square	86.7%	100%	100%	
	Rectangle	70%	100%	100%	Often called 'square'
	2. Knowledge of Colour	Names	Matches	Sorts	
	Red	100%	100%	100%	
	Blue	86.7%	100%	100%	
	Green	93.4%	100%	100%	
	Yellow	96.7%	100%	100%	
	3. Differentiate Big/Little			100%	
	4. Identifies Position of Object				
	First	66.7%			First & last confused, probably due to lack of fixed left to right eye movement. Last less well understood than first.
	Last	46.7%			
	In Middle	100%			
D. Language	Concepts				
	On	100%			
	Under	100%			
	In	100%			
	Behind	90%			
	Between	60%			
	Next to	96.7%			
	Over	96.7%			
	In front of	100%			
E. Mathematics	Counts Objects	83.4%			Errors were due to role counting; ignoring objects.
	Knows Concept big	100%			
	" " small	100%			
	" " tall	96.7%			
	" " short	96.7%			
	" " thick	76.7%			
	" " thin	83.4%			
	Makes judgements about more/less	100%			

2. The Child Studies

The main evaluation task for the mid-year period was the compilation of child studies. This task required intensive observation of the children in theclass while they were involved in a wide range of activities. Discussion of children's behaviour, attitudes and abilities between the class teacher and program assistant formed the basis for the child studies and assisted with grouping procedures.

Most of the day was involved with face-to-face teaching, so much of the formative discussion material was unrecorded. However, child studies were completed on all the children. These contained statements of how the children coped with the personal and cognitive demands the program made on them. Comments were included on the main program variables (see section Aims and Objectives).

The format of the child studies remains unchanged from that used in the preschool. The categories commented on were

1. Child/Child Interaction
2. Child/Teacher Interaction
3. Child/Material Interaction

the information contained in the child studies was considered to be an evaluation of the children's socio-emotional growth through the year. The growth and development of personal skills in interactions of all kinds was a major program aim in social growth. Similarly, the ability to carry through tasks to a conclusion either alone or co-operatively in a group was an important program aim for personal growth.

It is not possible, nor desirable, to compare children directly on these variables. Differences in presumed ability may to a greater or lesser extent, be a function of the preferences of the observer. Instead, four sample child studies were chosen of children who achieved at different levels in the school based tests given at the end of the year. The differences in their learning styles in interactions can be seen from these reports.

1. Child/Child Interaction

a) Child T works well with a variety of children. Initially a little shy, he has become more natural as his confidence has developed. He works well in a group situation, sharing materials and offering alternative suggestions for play. He is beginning to rely on one or two people for constant companionship (11/78).

b) Child D plays mainly with a small group of friends, but mixes quite happily with other children. D's interactions are confident. D works well in a group, sharing equipment and knowledge.

c) Child G is a little shy with other children, and frequently plays alone, or on the fringe of a group. G plays well with others, sharing materials etc., - but play is always more involved and imaginative when alone. G has recently discovered the ability to entertain other children and enjoys this (when safely in a field he understands).

d) Child M is beginning to initiate interaction with other children - but he does so very quietly. He tends to rely on others' ideas. M works well with other children, generally sharing material and information.

2. Child/Teacher Interaction

a) Child T is still shy when approaching the teacher and usually gets someone else to ask on his behalf. When approached by the teacher, however, he is more open and happier to discuss his activities or needs. He generally seeks teacher acceptance before beginning an activity.

b) Child D responds well to teacher contact. D will talk freely and openly and will decide upon a course of action with the teacher. D freely approaches the teacher when seeking information or approval, but does not depend upon teacher to initiate activities.

c) Child G contact with teacher is always very polite and a little restrained. Lately it has become much more frequent and is beginning to share knowledge and experiences.When contacted by the teacher, G responds openly, but shyly. Usually aks permission before beginning an activity.

d) Child M still approaches teacher hesitantly, and usually only to request equipment, or to ask permission to initiate an activity. Is beginning to initiate activities more successfully, but still requires encouragement.

3. Child/Material Interaction

a) Child T is happy to initiate his activities once he has gained approval. His first choice is usually drawing or some form of construction activity, such as plasticene or paper skills. He works with a friend, rarely by himself, and completes the same object as that friends. He is usually happy to discuss his work, as it is often quite imaginative and he enjoys class and teacher approval. Often the object is completed solely for the purpose of showing the class.

b) Child D prefers to work with reading - based equipment, with which she is most confident. D also spends time practicing writing and reading skills and drawing ability. Recently D has become interested in construction material which she uses purely for the pleasure of constructing, rather than for creative play.

c) Child G uses a wide variety of materials and seems to enjoy drawing as well as creative play and outdoor activities. He favours the dressing up corner where he changes character completely to entertain the whole class.

d) Child M enjoys drawing, or using small construction material (such as animal shapes) and jigsaws. He prefers to initiate activities that he has been previously successful with.

These reports contain interesting and vital information concerning the children's learning styles and preferences that is not revealed by cognitive tests. Often, shortcomings in academic learning can best be remediated by adapting the style of presentation to the learning style of the child.

The program emphasises that the child who is the motivated, independent learner, who is secure in relationships with people will be the successful school learner. The preschool program was premised on this belief. The information contained in the child studies supports this view. This is useful formative evaluation, for it indicates that the beliefs about young children's learning that decided program priorities and procedures for the Contemporary Approach are valid ones.

The child studies will be used diagnostically in 1979 to assess individual needs in the Year One classroom. The child studies have proven to be an invaluable evaluation instrument, because they can be used formatively and summatively.

3. School Based Achievement Tests

The school-based tests were designed to test the children's knowledge and skills in the curriculum content specified by the school. They were administered to all the children in the group, towards the end of November 1978. They were informally administered in conditions as closely approximating classroom routine as was possible. This was important for obtaining the best results from the children, especially the less confident ones. The areas requiring summative evaluation were reading, pre-reading (specifically visual discrimination and auditory discrimination), number and writing. The fundamental skills considered necessary for success in year one were tested. These results are presented in Table 7.

TABLE 7: RESULTS OF THE TREATMENT GROUP ON SCHOOL BASED TESTS

Subject	N	Score Range	%	Cumulative %
1. Reading	25	0 - 5	0	
		6 - 10	0	
		11 - 15	8	
		16 - 20	0	
		21 - 25	4	12
		26 - 30	8	20
		31 - 35	20	40
		36 - 40	8	48
		41 - 45	20	68
		46 - 50	32	100
2. Pre-Reading				
a) Visual Discrimination	25	0 - 5	0	
		6 - 10	4	4
		11 - 15	0	4
		16 - 20	96	100
b) Auditory Discrimination	20	0 - 5	0	
		6 - 10	0	
		11 - 15	4	4
		16 - 20	96	100
3. Number	25	0 - 5	0	
		6 - 10	0	
		11 - 15	0	
		16 - 20	4	4
		21 - 25	16	20
		26 - 30	80	100
4. Writing	22	1	0	
		2	18	
		3	231	41
		4	36	77
		5	23	100

The pre-reading skills of visual and auditory discrimination had been well mastered by the group, as would be expected for developmental tasks. The reading text, which consisted of 50 sight words taken from the Breakthrough to Literacy scheme, predictably showed a greater range of scores. 52% of children scored between 41-50, which represents mastery of the reading program as assessed by the test.

The number test included items evaluating numeracy skills, knowledge of sets and vocabulary such as 'next to', 'out of', 'most', 'least', 'longest', 'shortest'. Again the group did well on this test, with 80% of children scoring between 26-30.

Formative evaluation was emphasised during 1978, as a tool for developing the program. It is anticipated that there will be fewer implementation problems in 1979 after a productive trial year in 1978. Formative evaluation in the form of child studies will be continued in Year 1, but more detailed summative evaluation of cognitive development will be undertaken. This will be necessary because the academic skill program will be more fully developed in Year 1.

2. THE BEHAVIOURIST PROGRAM IN THE KINDERGARTEN AT WHALAN PUBLIC SCHOOL, 1978.

A. INTRODUCTION TO THE PROGRAM

The Program is characterised by a philosophy which emphasises obser able behaviour while playing down the thoughts, feelings and motives of the children. The Program does not ignore internal processes. Nor does it say that they do not exist. It suggests, rather, that they are not useful in preparing a learning program. Because the emphasis is on behaviour that can be observed, educational objectives are specific and aim at something that can be measured. The curriculum is tightly structured and a teacher's task is to assess a child's position on a continuum of development. Each step is taught at a manageable pace and once mastered the child progresses to the next level. Also, the Program aims to eliminate the negativeness of teacher's behaviour and a positive approach is cultivated. The school is seen as a broad social agency, but in particular, Reading, Number and Writing are stressed.

In 1978, the Behaviourist Program was continued on into Kindergarten. Essentially, it retained all the elements mentioned above which are integral to a Behaviourist Program. These elements are discussed in the following order:

1. Those relating to children;
2. Those relating to teachers;
3. Those relating to parents

B. THOSE ELEMENTS RELATING TO CHILDREN

In Kindergarten, Reading, Number and Writing were stressed. It was in these three academic areas that individual progress was monitored and evaluated.

Within these academic areas a variety of educational objectives were stated. For example, by the end of the year the children were expected to be able to:

1. Identify a basic sight vocabulary of 30 words;
2. Phonetically identify 16 sounds;
3. Construct simple sentences using simple punctuation;
4. Recognise their own name in written form;
5. Write their own name;
6. Use lengthy terms in single, comparative and superlative forms in pictorial representation;
7. Relate a specific time to a specific event;
8. Recognise a 20c coin and name the native animal on it;
9. Recognise name card for four basic shapes.

These examples attempt to represent the kinds of academic objectives set down for kindergarten. They also meet one of the principles of a Behaviourist Program which requires that objectives should be specific and should aim at something that can be evaluated. It is important in a Behaviourist Program to describe what behaviours a student should be able to perform after completing an instructional sequence. Mager (1962) insists on stating educational objectives in behavioural terms. A final performance must be something which a student does, not what he/she feels, appreciates, understands, or is aware of. Unless knowledge and appreciation are translated into observable behaviours there is no way to decide whether or not a student has reached the instructional goal.

After stating the objectives, the usual procedure is to decide on practices that will lead to their accomplishment. There were numerous strategies employed by the Kindergarten teachers to achieve their objectives. For example, it was stated that one objective was that children should be able to demonstrate their ability to construct sentences using simple punctuation. This objective was achieved through the use of an individualised language scheme. To begin this scheme a child required a "bank" of 12 basic sight words. By November all the children were using the scheme and had extended their "bank" to an average of 39 words. These words were then used in creative writing lessons when the children constructed their own sentences. A few samples follow to illustrate these sentence structures and their punctuation:

- I am playing at my big home with my friends.
- Is it my friends birthday party today?
- Am I going to a big birthday party?
- We can see the children running at school.
- My little baby is at home kissing my Mum.

All the children were able to construct simple sentences such as these and punctuate them appropriately with either a full-stop or a question mark.

The following work schedule was followed in order to cover the variety of objectives:

9.00 - 11.00	The teacher covered the weekly concepts drawn from the three academic areas. This coverage may be in the way of introduction, review, drill, discovery or whatever practice was appropriate for that topic. The group size could fluctuate from whole-class, through small groups to individual instruction.
11.15 - 12.30	Different activity areas were set up. Some of these were compulsory activities while others were free choice. Such activities might be the listening-post, shopping, weighing, water play, sentence maker or telling the time. The nature of these activities

were suggested by the concepts stipulated for the week. Teacher and parents monitored the compulsory activities. (See photograph 4).

1.30-2.30 This period tended to be dominated by activities drawn from the other subject areas such as Art, Craft, Physical Education, Social Science etc.

The success of these practices in having children master the stipulated objectives was evaluated in November. Figure 3 illustrates the final assessment of the children's mastery of these skill areas.

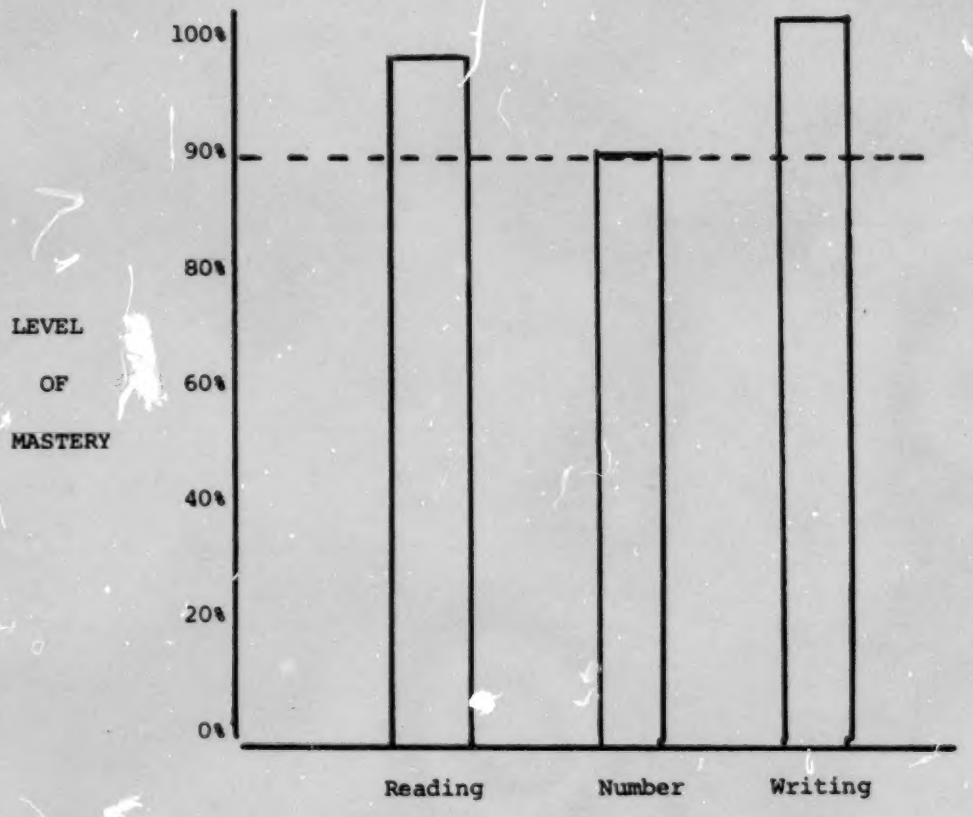


FIGURE 3: PERCENTAGE OF CHILDREN MASTERING SPECIFIED AREAS

It may be seen from Figure Three that in Reading 93 percent of the children mastered the specified skills, in Number 90 percent did so, and in Writing 96 percent of the children demonstrated mastery. These results suggest that the Behaviourist Program effectively enables children to accomplish the specified behavioural objectives.

C. Those Elements Relating to Teachers

It is considered that one of the most critical defining features of a Behaviourist Program is teacher behaviour which is required to meet a prescribed behavioural checklist. This checklist (see Figure 4 Instructional Teaching Criteria Observation Form) sets out the kinds of teacher behaviours required in this Program. It can be seen that no percent disapprovals are expected from the teachers. It is also expected the 100 percent of the contacts that teachers do make with children contain praise and that this contact is made only with children that are on task.

6. Discrimination Activities

FIGURE 4:

Instructional Teaching Criteria Observation Form

Date: _____ Teacher: _____ Observer: _____

1. ON-TASK OBSERVATION

Time Began _____ Time Ended _____ Total Time _____

Number of Children in Group _____

Minutes: 1 _____ 2 _____ 3 _____ 4 _____ 5 _____

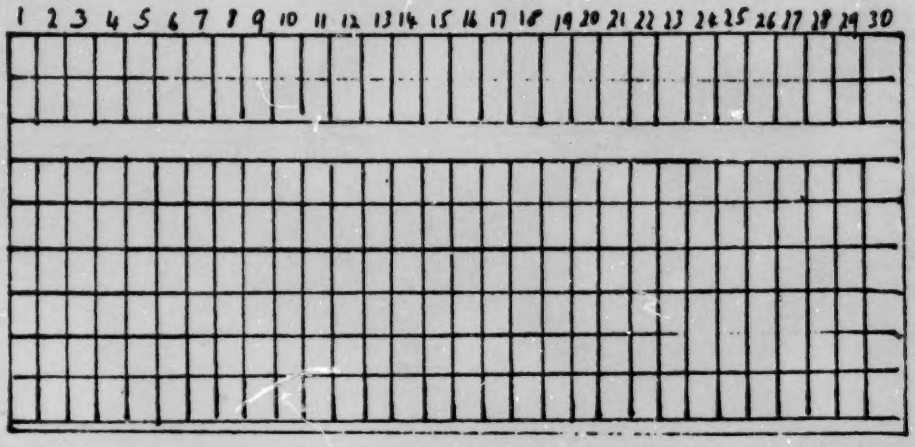
6 _____ 7 _____ 8 _____ 9 _____ 10 _____

Percent On-Task = $\frac{\text{Number of children On-Task}}{\text{Number of children in group x 10}}$ = _____

2. TEACHING OBSERVATION

Time Began _____ Time Ended _____ Total Time _____

Contacts


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
On-Task Contact
Off-Task Contact
Prompt
General Praise
Descriptive Praise
Question
Discussion
Disapproval

3. SUMMARY - INSTRUCTIONAL TEACHING CRITERIA

80% Children On-Task	Yes	No
100% On-Task Contacts	Yes	No
100% Contacts contain Praise	Yes	No
90% Contacts with Prompts also contain descriptive Praise	Yes	No
0% Disapprovals	Yes	No
Time-out (if used) is used appropriately	Yes	No

This instrument was used on 22 occasions over the Kindergarten year, each observational session lasting ten minutes. The results of this monitoring (see Figure 5). suggests that the teachers' behaviours met most of the prescribed criteria.

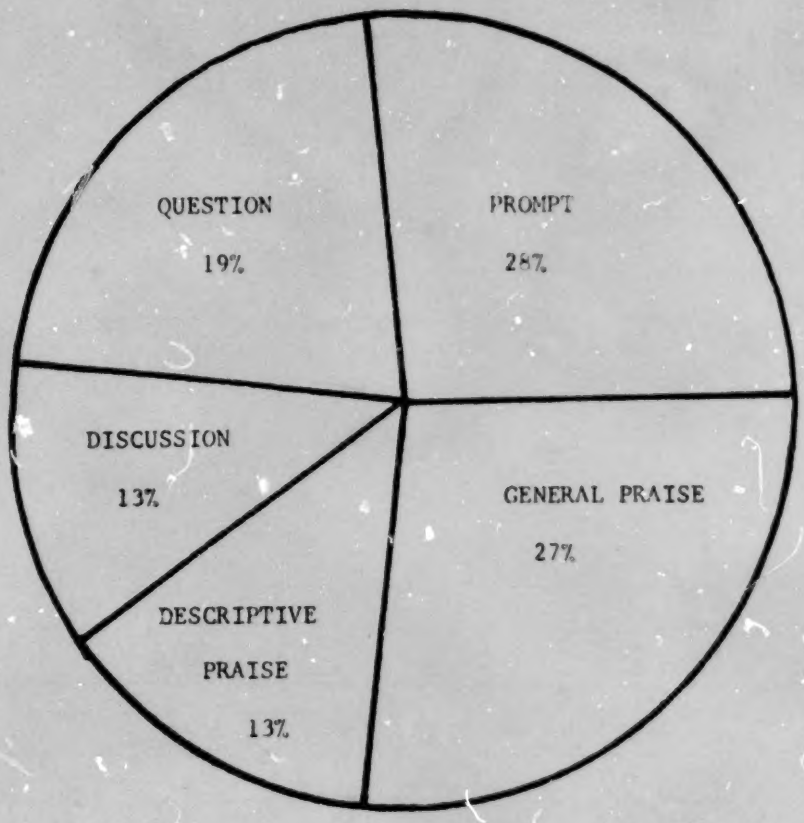


FIGURE 5: :PROPORTION OF TEACHER VERBAL UTTERANCES

Time-out was not used simply because it was not needed. Teachers could effectively manage minor misbehaviour by reinforcing children that were on-task. On each occasion, the minimum requirement of 80 percent of the children being on task was reached. Usually, over 90 percent of the children were on-task. The teachers made 100 percent contacts with children on-task. No percent disapprovals were made. However, the Program also required 100 percent of these contacts to contain praise. The teachers managed only 40 percent on average. There are two reasons for this low figure. First, it is pointed out that the percentage figure is lowered by the inclusion of the initial training sessions. The end of the year observational sessions indicated that the teachers were reaching a 70 percent level of praise utterances. However, even this is below the prescribed requirement. This leads to the second point. As was mentioned

in the Third Annual Report the criterion level of 100 percent of contacts needing to contain praise led to a feeling of 'artificiality'. The 70 percent level gave an impression of 'naturalness' and fluency to the teachers' verbal responses. This practice is still in keeping with Behaviourist theory. Instead of operating on a total reinforcement schedule the teachers operated on a partial reinforcement schedule. Evidence indicates that such a schedule strengthens the 'rewarding' factor of praise. Teachers were able to increase or decrease the schedule according to the contingency of the situation. For example, unusual behaviour, either creative or disruptive, would lead to an increase in the frequency of the teachers' verbal praise.

It also needs to be pointed out that there was a staff turnover of three different teachers during the year. However, disruption to the Program was minimal since each new teacher was able to meet the Program's requirements relatively quickly. The one requirement that appeared difficult for teachers to effectively implement was the need for 90 percent of the contacts with prompts also to contain descriptive praise. It can be seen from Figure Five that the teachers did not meet this requirement since 28 percent of the verbal responses were prompts while only 13 percent were descriptive praise utterances. Other than this, however, the teachers found the Program one which they could quickly and easily implement.

D. Those Elements Relating to Parents

The involvement of parents in the Program was an objective common to all Project Programs. Parents have legitimate and valuable contributions to make to the educational process and it was essential to canvas these if the interactionist nature of the Project were to be fulfilled. Parents were invited to participate in three different ways: material preparation, working with the children in the classroom (see Photograph 5) and decision making. Material preparation was the most successful. Regular newsletters went to parents for comment on policy but these apparently were taken to be non-negotiable. It would appear that more discussion groups are necessary to keep the parents informed and so gain immediate feedback. With working in the classroom, 30 percent of the parents were able to make use of this opportunity consistently. Two or three parents were usually at hand each day to work with the children. The 30 percent figure may appear low but parents seemed to have legitimate reasons for not taking up the invitation. These are discussed in the section on parents' attitudes and expectations.

E. Summary and Conclusion

In summary, the Program presents itself as a self-contained evaluating package. It stipulates that educational objectives be behaviourally defined. By doing so, objectives are made accessible to measurement. It was effective in achieving the stipulated child-oriented objectives and teachers found it relatively easy to implement. In conclusion, the Behaviourist Program appears a viable model for a school to adopt if the objectives discussed above are so valued.

7. MOTHERS PLAYED AN IMPORTANT PART IN HELPING IN THE CLASSROOM

3. The Competency Based Program at Madang Avenue School, 1978

Introduction

The focus of the Competency Based Program has been the specification, by teachers, administrators and parents, of those competencies considered essential for the child to master in order to achieve school success; and with the development and implementation of a program which has as its basis, the successful acquisition of these competencies by children. During the formulation of competencies, relevant principles suggested by child development theories were stressed and the concept of goals judged by teachers, administrators and others to be important, kept to the forefront in planning.

In 1978 the Program, which previously operated at the preschool level, was extended to Kindergarten - the first year of formal schooling. Initially all children who had experienced the Competency Based Program in preschool and non-preschoolers, enrolling at school for the first time, were grouped together, in a large double classroom, in the care of two teachers. However the fall of enrolments at the school resulted in the transfer of a teacher and consequently a treatment class comprising two thirds ex-preschool children and one third children with no preschool experience was formed. (Children were matched for age, sex and experience and randomly assigned to treatment and non-treatment classes. The non-treatment class was a composite kindergarten/year 1 class).

Program Aims and Objectives

The curriculum of the Competency Based Program was designed to expose children to a variety of experiences generally structured around a thematic approach in which specified competencies were planned for. From this broad framework, more specific experiences were provided, for each child, which would lead towards mastery, with the sequence and rate varying for different children.

The key curricular areas in the program have been language and communication skills, co-ordination skills, cognitive skills and creative activities. The broad aims of the program developed by the teacher, keeping in mind the abilities of the children and the school context, were:

- To develop skills, concepts, attitudes and behaviour appropriate to each child's stage of development
- To create a non-threatening, stimulating classroom learning environment
- To involve parents in their child's learning, both at home and at school

The following list presents the teacher's statement of broad objectives in terms of target teachable competencies, provided through direct instruction), and competencies not directly taught.

Direct Teaching Competencies

1. Language and Communication Skills

To be able to:

- Use language in social interaction
- Use language to explain
  - describe
  - label
  - predict
  - recall
  - express feelings verbally
- Express feelings non-verbally
- Use non-verbal clues
- Articulate clearly and correctly

2. Categorising Skills

To be able to:

- Form concepts -
  - understand
  - same
  - not the same
  - different
  - like
  - unlike
  - alike

  is
  is no
- Sort
- Ordinate
- Conserve -
  - one to one correspondence
  - continuous quantity
- Measure
- Denote spatial relationships

3. Health and Safety Maintenance

To be able to:

know appropriate health behaviours
observe appropriate health behaviours
know appropriate safety behaviours
observe appropriate safety behaviours

4. Perceptual and Perceptual Motor Skills

To be able to:

Discriminate by sight	e.g.	size, shape, colour, words, sentences etc.
	sound	loudness, tone, pitch
	touch	mass, softness, roughness
	taste	sweetness, salt
	smell	spice, smoke

To be able to:

construct
draw
copy
control large muscles
control small muscles
co-ordinate large and small muscle movements
demonstrate adequate hand-eye co-ordination

Other Competencies

5. Socio-emotional development - realistic concept of self as initiating and controlling agent. Problem solving behaviour

To be able to:

plan action
initiate action
persist in action
ask questions
analyse results and draw conclusions
demonstrate self-reliance
demonstrate realistic appraisal of own levels of abilities and skills e.g.

Attitude to schooling

expresses desire to come to school

demonstrates enjoyment of school activities

6. Pro-Social Behaviours

To be able to:

assume appropriate social behaviour

get attention

maintain attention

adopt the perspective of another

respect the individuality of others

The above list was translated into specific target goals for key subject areas, as follows:

Mathematics

Concepts	Associated Skills
1. Understands number one to one correspondence	1. a) Identify and discriminate among sets having i) same number of members, ii) different number of members, iii) exactly the same members. Extension: greater than, less than. b) Identify number of members in a set, (0-10_ c) Write numerals (0-10) d) Count write numerical sequence, (1-10) Extension: count to 20.
2. Shape knows basic geometric shapes	2. a) Identify a named geometric shape b) Recognise the constancy of a shape, regardless of its size. c) Match shapes d) Recognise shapes in the environment e) Identify shapes in the environment f) Discriminate the attribute of shape from other attributes of an object.

3.	Understands size, quantity and mass	3. a)	Identify and classify objects using appropriate terms, e.g. big/little, large/small, heavy/light, few/many, tall/short, fat/thin.
	degree of size, quantity and mass	b)	Identify a set number as being large, larger largest; small, smaller, smallest; middle-sized; more, fewer.
4.	Order	4. a)	Order on the basis of size, number, quantity, mass, time.
		b)	Order on the basis of position, e.g. first, next, last.
5.	Spatial relationships	5. a)	Use positional and directional words; in, on, under, outside, inside, out, down, up. Extension: near, around, out of, with, at, in front of, beside, behind, into, over.
		b)	Follows simple directions using positional words. Extension: can follow a short series of directions; can give directions.
6.	Colour	6. a)	Identify primary and secondary colours and black and white
	Degrees of colour	b)	Identify colours in the environment
		c)	Discriminate light/dark; bright/dull.
7.	Class or category	7. a)	Generalise - name the category to which an object belongs
		b)	Sort into categories - colour, shape, size, etc.

Language

Area		Associated Skills	
1.	Language as a tool of social interaction	1. a)	Can communicate ideas in an acceptable manner.
		b)	Can talk in sentences
		c)	Is able to carry on a conversation
2.	Language appropriate to themes, and other classroom activities, e.g. stories, poems, reading.	2. a)	Acquisition of vocabulary associated with themes and other classroom activities, e.g., i) ability to label parts of body - head, neck, hair, face, eyes, shoulders: ii) ability explain why an event in a story occurred: iii ability to describe where a part of body (e.g. elbow) is: , ability to predict - e.g. what will happen next in story: v) ability to recall events from stories, recite poems and finger plays: vi) ability to determine, e.g. the name of an animal from non-verbal clues: vii) ability to express feelings verbally, 'How do I feel when....' viii) ability to express feelings non-verbally - 'this is how I look when....' ix) ability to find the main idea in a story etc: x) ability to see relationships between, e.g. teeth and eating beds and sleeping etc.

8. WHOLE CLASS ACTIVITIES - A NUMBER GAME

Reading

A. Pre-reading

1. Discrimination	1. a)	Extension of sorting, classifying, labelling, matching and ordering skills in mathematics and language to include pictures, puzzles, words, sentences and letters.
	b)	Extension of discrimination skills to include sounds - gross differences in quality, pitch, tone and volume - e.g. lion's roar, cat's mew. Extension: fine differences, e.g. word beginning.
	c)	touch: textures, mass, shape.
	d)	taste: like and unlike tastes; grades of e.g. sweetness.
	e)	smell: familiar and unfamiliar smells
2. Sequence	2. a)	Ability to perceive sequential relationships in a picture story.
	b)	Ability to remember the sequence of events in a picture story, an oral story.
	c)	Differentiate between left and right.
	d)	Read picture stories in left to right progression.

B. Reading

1. Words have meaning.	1. a)	Ability to recognise own name; names of other children.
	b)	Ability to recognise words labelling objects in the classroom and other familiar words.
2. Words can be arranged to tell a story.	2. a)	Read stories written about their activities.
	b)	Read simple sentences from Mt Gravatt Readers.

Specific Objectives For Motor Skills Were As Follows:

Gross Motor Skills

Gross

1. Ability to crawl
2. Ability to run, jump, hop, Extension: skip.
3. Ability to throw and catch, and kick a ball (large then small)
4. Ability to balance on one foot.
5. Ability to walk on a balance beam
6. Ability to forward rool.
7. Ability to co-ordinate large muscles.

FINE MOTOR SKILLS

1. Ability to control a pencil and crayon
2. Ability to use scissors to cut straight and large curved lines
   Extension: finer curve and angular lines.
3. Ability to co-ordinate finger movement.
4. Ability to manipulate paint brush
5. Ability to co-ordinate and control small muscles, i.e. hand - eye orientation.
6. Use left to right eye movement.
7. Draw lines left to right, top to bottom, anti-clockwise circles.
   Extension: forming letters.

VALUES AND BEHAVIOURS TO BE REINFORCED WERE:

1. Develop positive attitude toward self, school and community
2. Can be self directed.
3. Can initiate play.
4. Can play with other children
5. Can share effectively (equipment, toys, and space)
6. Can develop manners i.e., please, thank-you, excuse me, not pushing in, waiting turn)
7. Can persist in activities
8. Ability to discriminate between saf and unsafe places, people and behaviours.
9. Ability to know how to care for ones body, i.e. food, cleanliness, appropriate clothing, exercise.

ORGANISATION OF LEARNING ACTIVITIES

The Competency Based Program is curriculum-centred rather than child-centred in its approach, in that target competencies have been specified. The focus of the curriculum, however, centres upon individual instruction with each child achieving mastery in the various competencies at his own pace. The learning experiences provided to facilitate mastery depended upon the entering behaviour of the child or group concerned. Because of this, the teacher assessed the entering behaviour of each child, and presented the simple and progressing to more complex tasks. The use of concrete materials and interesting activities to develop and consolidate concept was a normal part of the daily activities. For certain periods each day children engaged in self initiated activities. During this time the teacher encouraged independent planning and carrying-out of activities, as well as the development of pro-social behaviours.

Unlike some of the other programs in the Early Childhood Project, no specific teaching style is specified for the Competency-Based Program. The teacher interacted continuously with the children, helping, guiding and instructing where necessary. Modes of instruction varied from large group activities, with small group activity follow-up, (groupings were homogeneous - based on ability, with each group engaged in activities at an appropriate level of difficulty) to individual instruction with the teacher, or specialist teacher.[1] Twice weekly, pairs of children worked with selected

[1] The resource and migrant teachers worked with children who had language, communication or perceptual difficulties.

year 6 children on number or pre-reading games.[2] The particular emphasis upon individualised instruction necessitated careful planning on the part of the teacher in order to satisfactorily match child with task, and detailed checklists of progress in mastering competencies, together with comments on social behaviours have been kept on each child's progress to expedite this procedure. The child thus was presented with tasks which were challenging, but not frustrating; and his success, coupled with the teacher's praise aided the development of intrinsic motivation in the child.

As stated earlier, the teacher varied the day's program between whole class, group and individual work, and between formal and informal settings. The class time table has changed over the year as the children's ability to engage in more formal activities for increased amounts of time developed. For third term the block time table was as follows:

9.00	Morning activities - singing, news. Assembly Tuesday, Thursday.
9.30	Prewriting, listening, phonics. Wednesday playschool (T.V.)
10.00	Directed activities - remedial groups with specialist teachers - reading and maths activities
11.00	Recess
11.20	Number: recognition, simple addition, subtraction, attribute blocks, rods - shape, colour, size order, stencil, activities using new, revised concept.
11.50	Reading groups - Mt Gravatt reading scheme, books and activities (with teacher pre-reading, advanced and aide) pre-reading, remedial
12.15	Gross motor activities, singing, music and movement, picture talks, social studies.
12.45	Lunch (eaten in classroom)
1.45	Art, craft. Tuesday gross motor groups with mother-helpers singing games.
2.30	Dismiss, (children collected from classroom by mothers)

The Program has been developed through a number of themes:

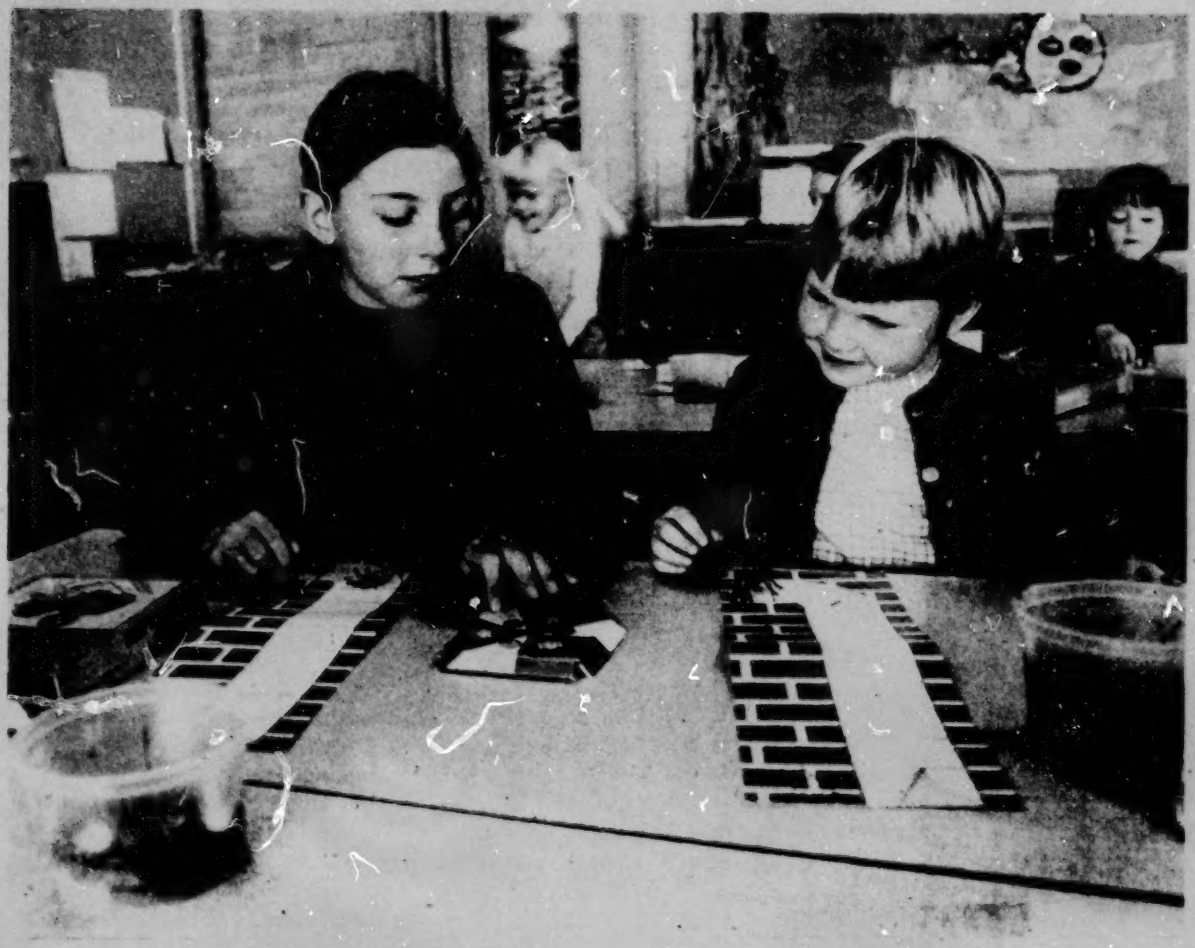
Term 1: 'All about Me.'

Myself:	Name, sex, class, age, teacher
My body:	Parts and their use, senses.
My family:	What is a family? Family groups, family members, family members have different ages, growing-up brings changes, things I can do at my age.

---

[2] Particular stress was placed on the development of pro-social behaviours, e.g. sharing, taking turns, etc.

9. YEAR 6 CHILDREN WORKED WITH THE KINDERGARTEN CHILDREN TWICE WEEKLY ON NUMBER OR PRE-READING GAMES



Term 2: 'Animals'

Types of animals, body parts, body coverings, uses of animals: pets, farm animals, zoo animals.

Experiencing through our senses in relation to animals: sounds of animals, what do they look like, smell of animals, feel of animals (visit to animal world, variety of specimens in the classroom).

How animals grow and change, how they move and breathe.

Term 3: 'Nursery Rhymes, Fairy Stories and Christmans in summer'

Magic: fairies, elves goblins, and witches.
Real and not real, fact and fantasy - wishes, dreams and spells.

Religious significance of Christmas
Customs, legends and traditions of Christmas
White Christmas/summer Christmas

Examples of the expression of competencies through themes are as follows: (Animals)

Ability to label - body parts: head, body legs, tail, hoof, paw, claw, ears, eyes, nose, snout, beak, mouth, fins, wings, teeth, jaws.

body movements: fly, crawl, slither, run, hop, climb, prowl, stalk, bound, jump.

body coverings: fur, skin, wool, feathers, hair, shell, down, scales, spines, fluff

Ability to categorise -

Animal types: birds, fish, reptiles, insects.

Animal uses: pets, zoo animals, farm animals, circus animals, wild animals.

Ability to explain -
Reasons for above classifications (wild, pet etc)

Purpose of animal covering, body parts, movements.

Ability to predict
Stories, (lion and mouse: what might happen next)

Situations: what might happen if ... the man next to you had a lion as a pet, etc.

The achievement of non-teachable competencies was largely through structuring situations where the child could plan and initiate his own actions, especially in the free play situation. He was encouraged to persist with activities through teacher interest and approval.

The play situation, together with incidental experiences in reading and number games, was an ideal vehicle for encouraging the development of pro-social behaviours. Turn-taking, recognising the rights of a child using some equipment and the needs of a child who had been waiting for a turn for some time, were encouraged through teacher attention, intervention and reinforcement. The Year 6 children who assisted in play situations twice weekly also encouraged the development of pro-social behaviours in this way.

A significant secondary purpose of the program has been to encourage self-motivated activity by the child, independent of close teacher supervision. As small group and individual instruction is a major feature of the program, it was necessary for those children, not immediately under the teacher's control to work independently and productively on worthwhile teacher structured or child initiated tasks.

During the formulation of the program it was hoped that parents would assist the class teacher by working with individuals and small groups. The intention was to capitalise upon and extend the parental classroom activities begun when the cohort was in preschool. A variety of approaches were adopted during the year in an attempt to achieve this goal. However, although a number of parents came regularly to assist in the classroom, and others came earlier than necessary to collect their children and so participated in some of the afternoon activities, and almost all parents

The Role of the Teacher

Although there is no specified teaching style for the Competency Based Program, the role of the teacher in this program is demanding. As stated earlier, the program requires sequential structuring of the learning tasks. Detailed records must be kept of the progress of each child to ensure that children proceed at their own pace on work designed for their particular ability levels. The program therefore was most fortunate to have a teacher as enthusiastic and competent as Mrs Davies.

The climate of the classroom was warm and supportive at all times. The children were encouraged to engage in and persist with set tasks devised by the teacher. Each task was structured to stimulate and maintain interest and to ensure success at each stage of the program. Interest, too, was maintained through the constant variation in the day's activities. Children moved regularly from seatwork to groupwork, from whole-class to individuals and from the classroom to outdoors activities.

The Classroom Environment

The room was attractive in its arrangement. Displays related to particular themes studied were made by the children and renewed frequently. There were four groups of tables: children were seated at these in ability groups for skills, but at other times children sat where they pleased. Shelves, housing equipment, books and toys acted as dividers, separating various areas of the room. The toys and equipment were attractive, colourful and durable and they were chosen to cater for a wide range of abilities, e.g. jig-saws ranged from very simple to quite complex. In addition to the nature area, there was a 'wet area' for painting, set with easels, and water-play, as well as a 'dramatic play' area which alternated from being 'house', or a shop, to a hospital, complete with bandages, stethoscope, and 'nurse outfits'. Block and building materials proved very popular with both boys and girls, as did the hammers and saws, nails and blocks of softwood. A variety of carefully graded discrimination and number games and puzzles were beside each ability group work area. The room was very large, carpeted, heated, equipped with ceiling fans and had its own toilet. Sliding doors opened on to a flat grassy play area; and there was adventure playground equipment and a timber fort nearby. Comfortable trapezoidal furniture and large cushions, completed the furnishings and equipment used by the 27 children in the class.

Evaluation Measures

In addition to the measures gathered on all children in the Project, all children in the Competency Based Program were assessed on their achievement of program objectives. A series of criterion-referenced performance tests, based on those used previously in the program, were developed for each of the competencies listed earlier. An example of these appears as Figure 6. Children's progress was recorded on checklists throughout the year. These tests were used at the beginning of the year in order to group the class according to entering behaviours, and sections of them were used during the year to aid program development. They were used again at the end of the year to evaluate achievement of program goals. Program children were also evaluated using a checklist designed by the school. Examples of both checklists appear as Figures 6 and 7.

FIGURE 6

Criterion Referenced

Performance Test Competency Evaluation (Sample)

2. CATEGORISING SKILLS

Ability to form concepts

Goal: Child can compare and contrast, and verbalise, principles underlying familiar concepts, viz., same, not the same, different, like, unlike, alike, is, is not. (child should be able to form new concepts centering on classroom themes appropriate to age).

Given objects which are a) the same, and b) different in e.g. size, shape, colour or patter, the child can select them according to verbal direction, e.g. find 2 objects that are the same. Child will be able to explain why objects are the same or different.

Ability to sort

Goal: Child can sort objects, pictures or objects according to familiary qualities, functions, or relationships, and label, describe, or give verbal explanation for basis of sorting. He can also sort appropriate objects in more than one way, sorting from a mixed selection; logically eliminating or including objects in a group.

Ability to ordinate

Goal: Child can order on the basis of size, number, time and position. Child can order according to size: given extremes out 5/6 objects, child can fill in intermediate objects in proper place. Child can order groups according to number in group.

Ability to conserve

Goal: The child can match objects 1-1, with and without physical correspondence; child can physically place objects in 1-1 correspondence, child can establish 1-1 correspondence without physically matching.

Goal: Given examples of substances of unequal mass, child can identify which has more, which has less.

Goal: Given liquids, child can perform similar operations to those listed above.

Ability to measure

Goal: The child can use a variety of terms and methods related to the measurement of discrete and continuous quantities. The child can count correctly a group of objects up to and including ten, (extensions to 20), e.g. how many apples. The child can distinguish time relationships comprehending and using a variety of terms viz., a long (longer) time, early, late, before, after, today, tomorrow etc.

FIGURE 7

NAME ..... Preschool/non-preschool

Competency Checklist Date:

1. Language and Communication skills

To be able to

- Use language in social interaction
- Use language to explain
  - describe
  - label
  - predict
  - recall
  - express feelings verbally
- Express feelings non-verbally
- Use non-verbal clues
- Articulate clearly and correctly

2. Categorising skills

To be able to

- Form concepts - understand: same
  - not the same
  - different
  - like
  - unlike
  - alike
  - is
  - is not
- Sort
- Ordinate
- Conserve - one to one correspondence
  - continuous quantity
- Measure
- Denote spatial Relationships

3. Health and Safety Maintenance

To be able to

- Know appropriate health behaviours
- Observe appropriate health behaviours
- Know appropriate safety behaviours
- Observe safety behaviours
- Observe appropriate behaviours

Figure 7 continued....

4. Perceptual and Perceptual Motor Skills

To be able to

Distinguish by touch
sound
sight
size
shape
colour
letters

Construct copy
draw

Control large muscles

Control small muscles

Demonstrate adequate hand-eye co-ordination

Non-Teachable Competencies

5. Socio-emotional development - realistic concept of self as initiating and controlling agent

Problem Solving Behaviour

To be able to

Plan action

Initiate action

Persist in action

Ask questions

Analyse results and draw conclusions

Demonstrate self-reliance

Demonstrate realistic appraisal of own levels of abilities and skills

Attitude to Schooling

Expresses desire to come to school

Demonstrated enjoyment of school activities

Figure 7 continued.....

6. Pro-social Behaviour

To be able to

Assume appropriate social behaviour

Get attention

Maintain attention

Adopt the perspective of another

Respect the individuality of others

FIGURE 8: MADANG AVENUE INFANTS DEPARTMENT KINDERGARTEN EVALUATION

	Poor	Average	Good	Comments
SOCIAL ADJUSTMENT				
1. Attitude to school.				
2. Relationship with other children.				
3. Interest in work.				
4. Ability to concentrate.				
5. Verbal ability - spoken expression.				
PHYSICAL DEVELOPMENT				
6. Gross motor skills.				
7. Fine motor skills - hand-eye co-ordination.				
ACADEMIC SKILLS				
8. Rote counting to 20				
9. Recognition of groups to 10.				
10. Writing numerals to 10.				
11. Visual discrimination, size, shape, direction.				
12. Colour discrimination (rods)				
13. Writing own name.				
14. Word recognition.				
15. Beginning sounds.				

RESULTS

Overall, the specified cognitive and affective objectives of the Program were achieved.

Language and Communication Skills

For all but five children, the development of clear, fluent speech and/or the use of language in social interaction has been most satisfactory, with children readily communicating their ideas and initiating and carrying on conversations.

All have acquired a wider vocabulary, especially that associated with themes, and demonstrate increased ability to label, describe and explain.

Recall of poems and stories is generally excellent, whilst, for most children, the ability to predict is satisfactory.

Although there have been some gains in the ability to express feelings verbally and non-verbally, more experience in dramatic play is necessary to improve these abilities.

Each of the five children referred to above has received remedial assistance during the year. Two of the children, who are migrants, have followed an intensive program with the E.S.L. (English as a second language) teacher. The other three, who initially demonstrated reluctance to communicate - especially with adults - or immature speech patterns received special attention from the resource teacher and the school medical sister.

Categorising and Mathematical Skills

The acquisition of these skills was very satisfactorily achieved by all children. Each was rated as average or above average on these aspects of the school's evaluation checklist.

Health and Safety Skills

The children have demonstrated their acquisition of health and safety behaviours. In 1979, however, particular emphasis must be given to road safety as the children will be going home with their brothers, sisters or friends, or alone, rather than with parents as was the case in 1978. (This is because Year 1 will finish at 3 p.m. along with all other classes, whereas Kindergarten finished at 2.30 p.m.)

Perceptual and Perceptual Motor Skills

Pre-reading discrimination goals have been attained by all children. Over half of the children progressed to advanced games and puzzles, many of which involved difficult sequencing activities or complex patterns with few clues to aid solution.

Reading goals were adequately mastered by most of the children. All could read their own names and those of most of the other children in the class. Approximately three quarters of the class have acquired a satisfactory sight vocabulary and can read simple sentences from their first three reading books.

Gross and Fine Motor Skills

Most children successfully completed the gross motor program by the end of the year. However, a few were still experiencing difficulty throwing, bouncing and catching small balls, as well as skipping and executing a forward roll.

Three children have yet to display satisfactory skill in the use of scissors. On all other fine motor objectives, mastery was attained by all children.

Social Skills

Pleasing self-reliance was demonstrated by the children, who were able to plan, initiate and persist in activities in keeping with Program objectives. More opportunities for the children to analyse results and draw conclusions should be included in activities in 1979. Socially, the children displayed tolerance and respect for each other. Two extremely shy children have engaged in language remediation activities with the resource teacher. One child who tends to be aggressive has received additional attention from the teacher, contingent upon pro-social behaviours.

CONCLUSION

The overall atmosphere in the Program classroom is one where children busily go about their activities, with interest and enthusiasm; they co-operate with each other, not only in play and construction situations, but help each other on more formal tasks, and interact, generally in a constructive and friendly way. They enjoy coming to school and when collected by parents at the end of each school day, eagerly show their drawings, read their 'stories', and display their craftwork or repeat the new poem or rhyme they learnt that day. Possibly the main feature of this Program classroom is the enthusiasm of the children who obviously enjoy being productively engaged in the wide variety of interesting 'doable' yet challenging tasks they experience in the Program.

Plans are well in hand for the continuation of the program into Year 1 in 1979. Meetings between the Program Assistant and the present and future teachers have been in progress for some time. Particular tasks include designing a program which uses the stated competencies as a framework for the more formal tasks, which form the basis of Year 1 programs more particularly in the areas of reading, writing and numbers. It is expected that the children will continue to show very satisfactory progress as a result of the enthusiasm and support of the co-operating teachers and school personnel.

4. COGNITIVE KINDERGARTEN PROGRAM AT DAWSON PUBLIC SCHOOL, 1978

Although the kindergarten program was based on Weikart's Cognitively - Oriented preschool/curriculum in the Elementary Grades most aspects of the program have needed redevelopment, new implementation strategies formed and evaluation components reformed.

Unlike the High/Scope preschool curriculum, the Follow-Through version is less well documented, depending on the same statement of goals and strategies with only hints at their significance for children progressing from pre-operational schemes to concrete operations (e.g. from oral to written language). Certainly many curriculum features remain constant in the framework for teacher planning and child action but the details of content areas have needed substantial development. This has had to take place in the more constraining structure of formal schooling - directly subject to school policies and procedures.

Three teachers and one half-time aide, as well as a very involved mistress and many supportive parents undertook the task of concurrently developing and implementing the program with us. The teachers had had some preliminary introduction to the program in the preceding year from attending preschool curriculum meetings and workshops where a program framework was constructed. Nevertheless this was especially difficult in the first months as teachers trialled raw procedures and activities in the effort to create a viable yet consistent program.

After this initially frustrating period a model emerged which enabled children to work in much the same way as they had in the preschool while enabling teachers to cope with the higher teacher-child ratio, less spacious conditions and generally more restricted facilities. As well, the press of traditional methods, materials and expectations constantly embroiled us all in discussion, negotiation and eventually compromised decisions.

Again, at the beginning of 1979 the same process is continuing, following the 1978 model and hopefully developing it considerably. Perhaps this procedure, although somewhat painful, has been an important impact of the Project within the school, when teachers over three grades are continuing meeting together to plan and evaluate, to question, change and explore - indeed, to be <u>actively</u> involved in the curriculum development. It seems more hopeful that this will continue when more than 10 teachers have been involved with minimum preparation and the scheme continues to provide a curriculum framework from which they can take direction and yet operate in personally satisfying ways.

PROGRAM DEVELOPMENT

Within the limitations already described a routine was established which enabled a more formalised plan - work - represent sequence in the morning session (9-11), a selection among regular/routine activities in the briefer 11.15 - 12.15 session and another modified sequence in the afternoon (12.30-2.30).

The teachers incorporated a wide range of activities into the morning session, usually 10 or more among which children could choose, or alternatively, develop plans of their own. Planning occurred in four groups (5 at the beginning of the year) and then children worked in the areas. Two to four mothers could be relied upon to help as well at these activities.

Most of the children with preschool experience continued to operate quite independently in this complex environment but, at first, some children just beginning school were bewildered and needed particular attention. Mostly, teachers felt children planned and worked at activities in constructive ways and rarely did they need to intervene to prohibit activity or participation in specific activities (e.g. the more direct skill related activities - reading, writing, mathematics).

Children seemed prepared to select among the activities, on the basis of the activitiy itself and not in terms of the work required or the play 'opt out.'

Some spent long periods at reading and writing activities and continued to do so. Few areas were unattractive. If they became so teachers quickly altered them.

In the shorter mid morning and afternoon sessions children usually could choose among 3 or 4 activities, depending upon the number of adults available to supervise, and therefore tended to be those most suited to larger groups (of about 15-20) - music, dance, games, films, stories and so on. As well, school based activities occurred mostly at those times - assemblies, scripture and so on.

Representation times became somewhat more formalised review/recall and display/discussion sessions, but were felt to be still important as such. To compensate, teachers attempted to observe and interact with particular children during the morning session, to appreciate their individual, idiosyncratic expressive forms. Certainly there is no way, as teacher/child ratios increase, to continue to provide the same opportunities for individual and small group planning and work as there was in the preschool.

Contact Areas

For the logical thinking content areas - classification, seriation, temporal and spatial relations and number, a variety of commercial games and materials were used and activities requiring specific grouping, ordering, arranging, fitting, and counting skills.

Although teachers attempted to be systematic in their observation of children's emerging skills and changes in strategies, time for detailed, individual observation was restricted. Greater faith needed to be placed in the effectiveness of the child's independent activity.

This had its advantages and disadvantages. It prevented teachers from 'teaching' particular structured lessons and maximised the provision of interesting activities. But it did not allow for careful monitoring of some children who avoided activities or allow sufficiently for timely follow up. So, it would seem that although most children operated effectively within the program, those that did not, needed particular attention so that pre existing attitudes, preferences and styles are not simply accommodated by the program but are actively taken up.

To this end a further task for program development in 1979 will be the preparation of a more thorough observation record which might enable more effective monitoring in the case of some children, while reassuring teachers of the continuing development of others.

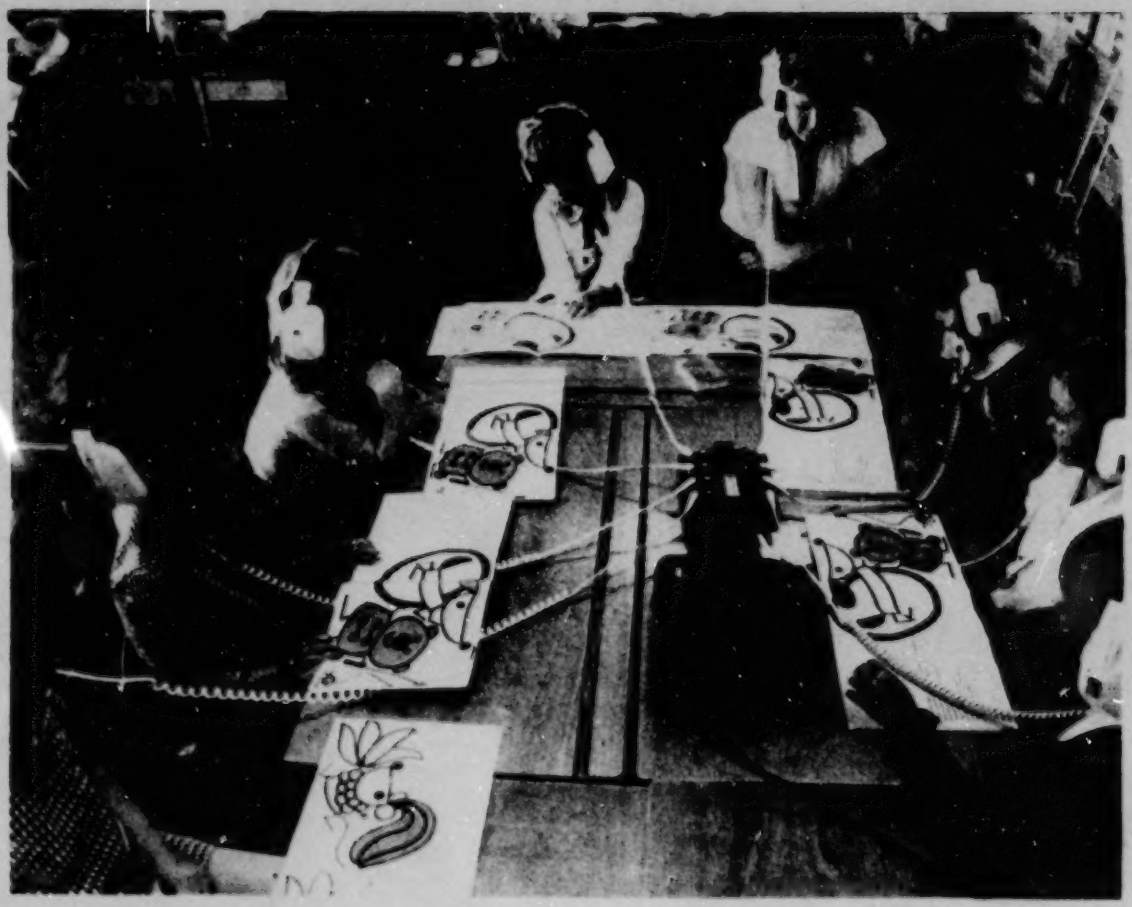
The routine enabled easy communication among children and adults, the association of written forms with children's language and the constancy of teachers' language models provided a wide, active base. Particular pre-reading activities (auditory and visual discrimination) were planned, as were specific reading activities (sight vocabulary word shapes, sentence patterns, Breakthrough to Literacy and so on). The basis for all these was the child's verbal representation, telling, recalling through the association of symbols and signs.

EVALUATION

In planning a program that children would often need to work at somewhat independently, teachers needed to be clear on their interest and capacity to work within the scheme. On-going observation as well as reflection in planning meetings and formal evaluation procedures provided a constant and workable evaluation system.

At the end of the year teachers reviewed their comments and grouped them to prepare a final summary of children's reactions (attitudes, styles, interests) and skills. These are briefly reported in the child observation record. They indicate the increasing adequacy of children's planning, their satisfaction with their work, their cooperative interaction style and developing skills.

The year has demonstrated the validity of the program for supporting the development of children's logical thinking skills, and their expanding social and physical knowledge in a cooperative social context.



10. LISTENING POSTS

TABLE 8

COGNITIVE PROGRAM EVALUATION

TEACHER RATINGS OF BEHAVIOUR

AREA	LEVEL	FREQUENCY
Planning	Complexity	
	1. no plan	0
	2. restricted range activities	35.6
	3. elaborate range activities	63.4
	4. develops/initiates plans/projects	0
	Implementation	
	1. no implementation	0
	2. basic implementation	46.5
	3. consistent implementation	53.5
Representation		
	Play/Action	
	1. role play	21.4
	2. role language	78.6
	3. coordinates role with others	0
	Verbal	
	1. recall	58.6
	2. elaborate recall	41.4
	Visual	
	1. representations	76.1
	2. elaborate representations	23.9
Response Styles		
	Attention	
	1. intermittent	54.3
	2. concentration	45.7
	Involvement-Materials	
	1. responds to directions	34.8
	2. restricted exploration	37.7
	3. active manipulation	27.5
	Task Satisfaction	
	1. no valuing of task/materials	4.4
	2. responds to praise	19.1
	3. task satisfaction	76.5
	Strategies	
	1. responds to directives	31.3
	2. impulsive strategies - unsystematic	50.7
	3. reflective strategies - systematic	17.9

Table 8 continued.....

AREA	LEVEL	FREQUENCY
Area	Social Interaction	
	1. reacts to others - follows	19.5
	2. cooperates	31.2
	3. initiates - leads	18.8
	4. domination - aggression	7.0
	5. negotiation	23.4
Logical Thinking		
	Classification	
	1. perceptual classifiers	34.0
	2. functional classifiers	14.0
	3. superordinates	39.5
	4. extrinsic categories	12.5
	Equivalence (Tasks ordered on level of difficulty from 1 to 5)	
	1. as many as	1 = 6.5, 2 = 22.6, 3 = 16.1, 4 = 12.9, 5 = 41.9
	2. addition - more than	1 = 25.8, 2 = 9.7, 3 = 9.7, 4 = 12.9, 5 = 41.9
	3. subtraction - less than	1 = 12.9, 2 = 6.5, 3 = 22.6, 4 = 25.8, 5 = 32.3
	4. multiplication	1 = 51.6, 2 = 3.2, 3 = 9.7, 4 = 6.5 5 = 29.6
	5. division	1 = 25.8, 2 = 12.9, 3 = 9.7, 4 = 5.2, 5 = 48.4
	Seriation	
	1. concrete objects	1 = 8.7, 2 = 4.3, 3 = 11.6, 4 = 21.7 5 = 53.6
	2. representational - perceptual	1 = 20.3, 2 = 8.7, 3 = 23.21, 4 = 7.2 5 = 40.6
	3. representational - inferential	1 = 21.7, 2 = 8.7, 3 = 23.2, 4 = 11.6, 5 = 34.8
	Time	
	Sequence	
	1.	6.7
	2.	42.2
	3.	6.7
	4.	6.7
	5.	37.8

Table 8 continued...

AREA	LEVEL	FREQUENCY
Strategics		
	Curiosity, Questions	
	1.	15.5
	2.	42.2
	3.	42.2
	Imaginative	
	1.	4.4
	2.	42.2
	3.	53.3
	Active, Explorative	
	1.	13.3
	2.	57.8
	3.	28.9
	Compares, Combines, Contrasts	
	1.	22.2
	2.	64.4
	3.	13.3
	Identifies Relevant Features	
	1.	13.1
	2.	84.4
	3.	2.2
Social Knowledge	Routines	
	1.	0
	2.	4.6
	3.	13.6
	4.	56.8
	5.	27.1
	Expectations	
	1.	2.3
	2.	0
	3.	0
	4.	34.9
	5.	62.8
	Explanations	
	1.	4.5
	2.	2.3
	3.	15.9
	4.	45.5
	5.	31.8

TABLE 8 Cont'd....

AREA	LEVEL	FREQUENCY
Cont'd.. Social Knowledge		
	Objects	
	1.	2.2
	2.	0
	3.	0
	4.	71.1
	5.	26.7
	People	
	1.	0
	2.	0
	3.	0
	4.	79.5
	5.	20.5
	Events	
	1.	2.3
	2.	11.6
	3.	48.8
	4.	37.2
	5.	0
Communication		
	Verbal Skill	
	1. minimal verbal skill	10.1
	2. verbal clarity	45.7
	3. verbal fluency	44.2
	Verbal Interaction	
	1. minimal verbal response	5.4
	2. verbal response/description	66.7
	3. initiation/personal meanings	28.0
	Language Interest - Activities	
	1. minimal interest	4
	2. responds	70.7
	3. initiates	25.3
	Vocabulary	
	1. restricted	43.7
	2. elaborated	56.3
	Syntax	
	1. informal	39.2
	2. formal	60.4
	Messages	
	1. salient, relevant	43.7
	2. complete	56.3

TABLE 8 Cont'd...

AREA	LEVEL	FREQUENCY
Cont'd... Communication	**Listening**	
	1. attention	49.6
	2. distracted	2.2
	3. restricted recall	21.6
	4. elaborate recall	26.6
	Expressive Language	
	1. responds/restricted	64.2
	2. spontaneous/elaborated	35.8
	Reading & Recognition	
	1.	12.5
	2.	19.4
	3.	26.4
	4.	22.2
	5.	19.4
	Sentences - Read	
	1.	24.7
	2.	21.9
	3.	20.5
	4.	13.7
	5.	19.2
	Sentences - Make	
	1.	29.2
	2.	12.5
	3.	26.4
	4.	13.9
	5.	18.1
	Vocabulary	
	1.	7.5
	2.	58.5
	3.	34.0
	Sentence Structure	
	1.	0
	2.	47.2
	3.	52.8
	Writing	
	Skills	
	1. trace	1 = 0, 2 = 7, 3 =18, 4 = 23, 5 = 22
	2. copy	1 = 10, 2 = 14, 3 = 7, 4 = 25, 5 = 14
	3. produce shapes, numbers, letters	1 = 7.2, 2 = 3.0, 3 = 17.4, 4 = 34, 5 = 27.5
	4. produce words, sentences	1 = 22.9, 2 = 12.9, 3 = 14.3, 4 = 21.7 5 = 28.6

TABLE 8 Cont'd.....

AREA	LEVEL	FREQUENCY
Cont'd.. Communication	Interest	
	1. responds - minimal	1 = 15.7, 2 = 22.9, 3 = 30.0, 4 = 21.4, 5 = 10
	2. plans - initiates	1 = 20, 2 = 22.9, 3 = 32.9, 4 = 14.3, 5 = 10
	Phonics	
	Sound Recognition - Receptive	
	1.	38.9
	2.	36.1
	3.	25.0
	Sound Recognition - Identification word beginnings	
	1.	36.6
	2.	40.9
	3.	22.5
	Sound Recognition - Productive - words from sounds	
	1.	83.3
	2.	6.9
	3.	9.7

5. THE CONTINUATION OF THE HOME BASE PROGRAM IN THE KINDERGARTEN AT BIDWILL PUBLIC SCHOOL, 1978

Children in New South Wales must enrol at five years of age at Infants schools. The concept of home teaching has no acceptance after this time. Instead, parents are given opportunities in some schools to involve themselves in classroom activities. It would have been possible in the community oriented environment at Bidwill school, to invite the Home Base mothers to continue their learning experiences in the context of their children's classrooms. This would have placed stress upon teacher organisation within these classrooms and some, or perhaps, the majority of mothers might not have wished to take up such an option.

A more philosophical objection to the involvement of a small group of mothers (only 50 mothers out of the kindergarten mothers had been part of the Home Base Preschool Program) was that a new elite might emerge. Rather than give a few parents special learning and teaching opportunities in a large school, it was decided to follow the Home Base program with an invitation to all mothers of the five classes in which experimental groups were placed. The invitation would specify some new and some existing opportunities for involvement.

Initially the project's sphere of influence was limited to these classrooms. However, later events widened the scope of parent involvement. A general policy of parent training in some teaching skills was seen as useful to teachers who might wish to avail themselves of parental assistance. It would also create an environment in which any parent could come to the school and participate at a variety of levels.

In this way two of the Home Base program objectives would be implemented:

1. The involvement of parents in the education process to the advantage of their own children's learning.

2. The building up of confidence in parents through the development of competencies.

EXPERIMENTAL AND CONTROL GROUPS

The majority of the Home Base Preschool cohort of 1977 were placed in four different kindergarten classes, grouped according to their original Home Base teacher. Of these, three children were randomly allocated from each class to a core group for more time consuming tests. They were matched by a control group of three non-preschoolers from each class. Both groups were balanced overall for sex although the number of girls and boys in each class was different.

It was unexpectedly difficult to find a genuine non-preschool experienced group since many parent had availed themselves of the services of private and involuntary institutions in Mt Druitt, even if for short periods.

PREPARATION OF TEACHERS

This did not occur at the appropriate time in 1977 because of the doubt as to whether Program implementation would continue into Bidwill Infants School. The four teachers were not identified until the first

week of the term in 1978, this being too late to prevent some negative encounters between teacher and parent. Two of the four teachers expressed positive interest in the program and one of these offered to undertake the leadership of a parent group of her own class mothers. Such group activities would function once per fortnight during school hours. Another teacher offered to provide opportunities for parents to assist in language development.

The two remaining teachers expressed some doubt as to their interest in and ability to involve parents, and no commitment was made. Originally it was thought that these classes might provide a contrast to the other two.

Focus Activities for Parents

These were based on school needs as well as parent expectations. The domains were:

1. Social and community activities
2. Language acquisition, both first language and ESL
3. Number activities through the use of concrete materials, based on the recognition of mathematical principles in everyday events
4. Reading assistnace
5. Craft
6. Leadership of school and community groups

OUTREACH TO THE COMMUNITY

Early in March letters were sent to all of the parents in the five classes which included Home Base children (Figure Nine) and about 70 of these were returned. Some parents indicated that they had no time, or interest in involvement in school activities, but the majority of the replies indicated one or more preferences. The options were:

1. Assistance in pre-reading and pre-writing experiences
2. Assistance in language activities (listening and talking with children)
3. Assistance in number activities
4. Regular parent discussion meetings
5. Belonging to a school organisation e.g. toy library
6. Helping to form a community support group

The four most popular choices were 1, 2 and 3, the class centred ones. Class teachers were asked to provide times when they would prefer to have parents in their classrooms. Two teachers had an open view of the program, the other two preferred assistance at specific times when the

focus was pre-reading or writing, craft and creative activities. However, one of these was prepared to involve parents in number work. Whenever selection 1 was indicated the teacher became responsible for interesting the parent and planning the level of involvement. In the case of options 2 and 3 the program advisor offered workshops with limited baby minding facilities.

LANGUAGE WORKSHOP FOR PARENTS

The initial enrolment for this group was 24 but the membership did not remain constant throughout the seven sessions. The effective enrolment was 12 and these mothers (no fathers attended) saw the sessions through in spite of acut accommodation problems. Some of the mothers who failed to continue did so because they preferred the practical aspect of classroom assistance to theoretical discussion and workshop activities. The workshops began with an emphasis upon the mother's role in determining the growth of the child language and moved on through listening exercises to a discussion of the pattern of language acquisition, and the emergence of language disorders in the early years. Some of the mothers' listening experiences took place in the classroom, others at home, and the latter were of especial interest because most mothers were not aware of their own children's speech and language at this level of specificity. The Laura Lee (Lee, 1975) syntax analysis was used Of the 12 mothers who participated in and became involved in language interaction with children, 8 had been in the Home Base program in 1977. One of these was extended by Teacher 1 in his own classroom by means of group and individual work with 3 or 4 children using the Peabody teaching kit. The remaining opportunities existed only in the language resource room, a withdrawal room for language enrichment. The participation of mothers in the language resource room proved to be a valuable one because:

- it gave the teacher at least some opportunity to break down the withdrawal classes into manageable groups for language interaction.
- it gave mothers opportunities for taking initiatives under supervision.
- mothers could learn a great deal from the language resource teacher.

Toys which were provided from Van Leer funds for parent involvement were supplied for this classroom. The majority of these were selected by mothers after they had already had some experience of levels and needs. Attendance of mothers was based on a weekly or bi-weekly commitment lasting about 1½ hours. Duri g a period of this length three different withdrawal groups would have experienced some interaction with mothers when they were available. However the number of regular helpers dwindled over the year due to illness, employment of the mother, and personal factors like lack of confidence in interactive skills. Insufficient support was available for this group which could have used the full participation of the program assistant in the early stages of this work since the number of children with structural and functional language difficulties in the whole of the Infants Department is quite large. Moreover

teachers are not generally equipped with adequate screening or diagnostic procedures for the selection of the most needy children. Many of the children are referred for behavioural reasons rather than for language defects.

The most valuable lesson from this attempt was that there is a pool of talent available for such individual work with children, but that it requires development. Support from the teacher is necessary at first because the belief exists in the minds of the parents and teachers that developing children's language is a specialist skill. It was possible to incorporate some parents who had not attended the workshops, into the language activities once the routines had been established. Three mothers gave so much of their time that they developed initiative, one undertaking some self-instruction in DISTAR language screening . (Engelmann, Osborn & Engelmann, 1972).

Parent training in structured teaching was not a new concept at Bidwill. However, its use in the language resource room for infants classes had not previously occurred. Plans were made to begin training a small group of mothers in DISTAR Language 1 early in 1979. The style of this program requires regular use and monitoring, and providing teachers were willing to use parents in this way, monitoring could be provided through S.R.A.

One unintended outcome was the effective learning achieved by two mothers whose own children were defective in communication skills. In one case the mother participated in language resource room activities twice a week, and in part of this time interacted with her own child as well as others. In the other, the mother benefited from workshops and private discussions and practical implementation at home.

MATHEMATICS WORKSHOPS

Although as many mothers nominated numbers as a "helper" subject only 5 active members remained at the end of the 5 sessions. This was attributed to the lower level of confidence in mathematics than in language skills. However, the anxieties expressed by mothers suggested that they wished to understand how to help their children with homework rather than to teach mathematics in the classroom. At the end of the second session one mother voiced her difficulty in connecting the workshops with actual number tasks in the classroom. Following this, two demonstration lessons were provided by teacher 1 and teacher 3 and created interest in Cuisenaire and other concrete activities. The theme of the mathematic workshops was set by the Nuffield film "Maths with Everything" and the mothers of preschool age children found it most interesting because their children could be observed learning mathematics through play. Had permanent workshop accommodation been available the quality and enjoyment of these sessions would have increased due to the number who wished to be able to follow some of the Nuffield activities. Teachers 3 and 4 made use of four of the 5 workshop mothers when they were available and gave them considerable support in lesson preparation so that they were able to take charge of an activity table with eight or more children at a time. The remaining "maths mother" assisted in class 5 and was not observed by the advisor.

FIGURE 9: QUESTIONNAIRE TO PARENTS AT BIDWILL

BIDWILL PUBLIC SCHOOL

13th March, 1978

Dear Parents,

The attached Questionaire is part of our Parental Involvement program in Kindergarten classes. Could you please complete this form and return to Class Teacher as soon as possible.

Mrs. L. Thomas
Mistress

Questionnaire

To the parents of children in Kindergarten 1, 2, 3, 4 and 5

Many of you already know that we are hoping to have as many parents as possible participating in these classrooms in 1978. The invitation is open to all parents, but some of you may have preferences for being involved in some activities rather than others.

This is the reason why I am sending you a list of the opportunities which will be available in some of the classrooms during this term. If you would like to add your suggestions please feel free to do so, in the space provided. Before you do this please read the following suggestions and place a tick in the square opposite the suggestions which appeal to you, and an X in the square if the suggestion does not interest you at all.

1. Assistance in pre-reading and pre-writing activities.

2. Assistance in language activities, that is being able to talk with and listen to children whose speech is immature, and use structured materials with them.

3. Assistance in number activities under the guidance of the teacher.

4. Meeting other parents in regular discussion over a cup of tea or coffee.

Examples of discussion topics

- child development
- Learning, and learning difficulties
- Setting limits for your child and helping him keep within them
- Health and nutrition
- Safety in the home
- You, your child and the Police, how they can help
- Care of your appearance and deportment, fashion ideas at low prices
- What the teacher needs to know from you

Questionnaire Continued...

5. Belonging to school organisations, e.g. Toy Library

6. Helping to form a community support group which will help in times of sickness and other difficulties.

Please list your own suggestions here: .....

.....

Should you care for any further information about this program, please ask your child's class teacher. If you would like to talk to me at greater length than the teacher's busuy schedule will allow, please write a note to that effect on the bottom of this page and I will contact you.

In any case please return this paper as soon as possible so that the teachers and I can begin to plan the dates of the meetings. They will be held during school hours, and we will try to obtain child-minders for the toddlers you may wish to bring with you.

Yours sincerely,

Programme Advisor

Mother's Name .....
Address .....
Child's name .....

12. CHILDREN USING CUISINAIRE RODS

Toys were bought with the mothers active involvement, but the preparation or these for classroom use proved to be a long and difficult task and on the whole the mothers preferred to use teacher prepared materials, although one mother was unusually resourceful, developing ideas for the group.

One problem with mathematics involvement is that it needs to be more systematic than other helping tasks, so that regular attendance by the mother is desirable. Such is not possible when illnesses of the children and other family problems intervene. A larger pool of mother helpers would reduce this problem to some extent, but not do away with it altogether because continuity of experience is important to the mother in developing the concepts. These four mothers did have the capacity to understand the child's difficulty in acquiring a concept. This meant that they could be trained as testers to assist in data collection at the end of the year.

GROUP ACTIVITIES

a) Following the success of the parent discussion groups in Home Base Preschool in 1977 it was suggested that teachers of Kindergarten children might like to interact with the parents in small groups. This would permit the teacher to know the parents better but would also allow the dissemination of school information and the sharing of ideas about common problems.

The teacher who selected this option had a business-like approach to her fortnightly group activities, outlining the topics and questions for discussion in a take-home note several days in advance. It was a small group, rarely having more than 6 members at any one session, but some mothers welcomed the opportunity to meet others, and from the group some teacher helpers were recruited. One problem was identified within the group, a non-English speaking mother. Since one of the Home Base mothers is bi-lingual it was possible to provide language assistance for her, and possibly this will extend to other Spanish speaking mothers at the school.

Primarily, the group was established for the mothers of one class only but one or two mothers joined informally and then the invitation was made to parents of another class to attend. It had been hoped that the teacher might take a key position in a wider community group, but this has been difficult to organise. The teacher has developed a special interest in after school activities in the district.

b) The major group development was the Community Network which derived from the S.H.E.* of the previous year but took a different form. Instead of trying to meet the support needs of the women of Bidwill by providing companionship and assistance in emergencies, the new community group had a social emphasis and some educational objectives selected by the parents themselves. Twenty-five women attended the first meeting in April and identified their interests in the following order:

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*Annual Report 1978, page 27.

1. Dressmaking and knitting
2. Crafts
3. Dancing
4. Exercise
5. Cooking
6. Finding out about community resources

One parent offered her assistance immediately in developing dressmaking skills. Another parent undertook to find a teacher of jazz ballet. The latter was the most successful single undertaking. Only a dozen notices were sent out for the initial meeting with the ballet teacher but about 50 women brought their children for enrolment after school hours in either ballet or physical exercise classes. The later provision of the playgroup room of Home Base for parent activities while children were dancing, resulted in an informal craft group. However, the activities for parents generally did not prosper with the exception of the fortnightly discussion groups on community resources.

Speakers for such discussion were generally available from private and public organisations and were invited by a coordinating committee to attend sessions. These were advertised throughout the school by means of a take-home note. The group remained fairly constant in membership rarely exceeding 15 mothers, and occasionally a father. Topics were legal aid, alternative life styles (e.g. the Kibbutz), road safety, nutrition, the nature of child welfare, the policy of the housing commission, the women's refuge, marital argument, school and community, rape crisis centres, aggression. At times when speakers did not arrive the meetings were informal social occasions. When speakers did come they were eagerly received with questions if their topics were perceived as very relevant e.g. the Housing Commission, Legal Aid, and the Women's Refuge.

As long as effective, albeit informal leadership was available from two Home Base mothers these meetings prospered. It is evident that a school based coordinator is desirable since family demands vary. This should not replace the parent leadership. Rather it should reinforce parent efforts and recruit new leaders as needed. However, with some assistance from the school based social worker at Shalvey High School (in the context of High School-Preschool interaction) the group retained its cohesiveness throughout the year. In addition it had the assistance of the YAC in providing several young women as babyminders. These were unemployed girls taking part in a life skills program.

The value of parent leadership of this group rests in the validity of the concept of the community's concerns. Parents were able to identify the focus of concern which in turn determined which speakers should be selected, to invite the speakers and to provide leading questions. Several speakers expressed their appreciation of the approach of the group and the level of interaction.

One function of the group was not realised because it required coordination and supervision, and this was not available. This was the agreed function of providing emergency childminding for short periods. Several mothers were listed but were not asked to help because no one could undertake the administration of the project.

Thus 1978 was a year of revealing potential for development rather than realising specific program objectives.

c) A sub-group of the community network which became affiliated to the P & C Association was the Aboriginal Women's Group. One of the Home Base mothers of 1977 is an aborigine with more than usual knowledge of the resources available to her people. Her ambition to provide input for all children at Bidwill Primary School is likely to be realised through an imaginative social studies curriculum to be sponsored by the school. It will provide experiences and information to all of the children to enhance their understanding of aboriginal history, beliefs, creative expression and relationship with the land. It will also involve aboriginal parents in teaching crafts and coordinating activities.

One of the gains made by this group has been the attendance of aboriginal mothers at committee meetings at school, as the result of doorknocking to identify the aboriginal families in the district. They are generally reluctant to join the larger community group.

d) Two Home Base mothers have acted as toy librarians, covering, indexing, purchasing and lending toys. The library has been incorporated into P & C Association activities. The Association has subsidised it to the extent of $100 this year. There are 160 toys on the shelves but insufficient money is available for the extension of library activities. Class teachers have been invited to use the library but the stock does not cater for a wide range of interests or for older children.

In 1979 it is hoped that the toy library can be seen as a resource for the mothers and teachers of the infants and preschool departments. It will be situated centrally, and adjacent to playgroup areas. There is every reason to hope that with teacher assistance and use in workshops it could be a valuable resource for parent teaching, especially if the Home Base unit is used to further parent understanding of the learning process at every grade.

e) Finally the largest and least formal of the community groups was the group of parents who met and talked with teachers informally at the school boundaries, when delivering their children or picking them up after school each day.

EVALUATION

In the program described there are two conditions which make evaluation very difficult. One is the lack of an explicit treatment group in the school context, the other is the difficulty of measuring the effectiveness of parent involvement in general. Project data was collected so that the long term effectiveness of the preschool program could be assessed in terms of academic achievement. In addition:

1. Home visits were made to each of the control families at the beginning of the year to identify contextual patterns (figure 10 p. 84) which could be compared with Home Base family contexts.

2. Two of the four classes were observed at the beginning of the year (PROSE, and all four at the end of the year.)

3. Lists were kept of attendances at meetings and workshops throughout the year.

4. Class teachers were asked to record which parents assisted in teaching learning experiences.

5. A new form of the Eight Block Task (Hess 1965) was administered at the end of the year to 48 parents and their children. Of these 31 were from the Home Base group of 1977, 10 were controls (non-preschool) and 5 were mother helpers who had been involved in various class activities in 1978 but had not participated in Home Base. The 31 Home Base children were drawn from the four different classes and so represented the four different Home Base teachers' groups of 1977. The new task is described in more detail below.

Some of the control mothers became involved as teacher helpers but they had not been directly encouraged to do so. One of these was a mathematics workshop member and also joined Home Base to enrol her second child in 1978. Such outcomes are untidy in terms of research but they are positive program results. They are examples of the incompatibility of scientific method and programs which are open ended.

a) CONTEXT INFORMATION

The limitations of checklists, preliminary interviews and the like are that they present only a selection of the possible relevant variables if they are coded into common categories. Each parent reveals herself in different ways. Sometimes the impressions gained over two or three visits are so different from one another that they appear to refer to different persons and places. However, some facts are recorded and some observations made which indicate that the home environments of the control children are similar in range to those of the Home Base children. The data says nothing about the quality of the interaction between the people within the context (see Figure 10).

FIGURE 10: MT. DRUITT EARLY CHILDHOOD PROJECT

HOME BASE PROGRAM

CONTEXTUAL INFORMATION

	yes	some	no
DESIGN OF HOME:			
1. Rooms accessible to child			
2. Child proofed			
3. Clean			
4. Yard used by child			
MATERIALS FOR CHILD'S USE:			
1. Outdoor equipment (swings, bikes etc.)			
2. Variety of toys suited to age			
3. Pictures and books suited to age			
4. Household materials used			
ADULT ACTIVITIES INCORPORATING CHILD:			
1. Share of household duties			
2. Gardening or car washing			
3. Errands			
PLAY ACTIVITIES INCORPORATING MOTHER:			
1. Formal games (cards, etc.)			
2. Art and craft			
3. Music/drama			
4. Reading			
USE OF TELEVISION FOR CHILDREN:			
1. Children's shows			
2. Indiscriminate watching			
NEIGHBOURHOOD:			
1. Children visit regularly			
2. Adults visit regularly			
3. Children go shopping with parents			
ADDITIONAL:			
1. Car used by family for outings			
2. Pets for children			

b) THE ELEXICON

This toy was substituted for the Eight Block (Annual Report, 1978, p.26) sorting game which had been considered non motivating and open to teacher effects. The teacher effect was that mothers tended to copy the teacher model when teaching their own child even though they had been advised to teach in any way they thought best. The Elexicon was a commercial toy (Ravensburger 1977) unknown to the Mt Druitt mothers requiring little instruction for adults. It is a picture matching game with feedback for the player, and offers the additional complexity of symbol substitution. Therefore it requires the mother to show and explain a fairly complicated process.

Two of the cards were selected for the mothers to use with their children and one card for teaching the mother how the game "worked". On each card there are 12 pictures in an open frame on the left which link up with twelve small pictures on the right. For example the teacher-mother card contains pairs of pictures which show the sources of different foods. Two hens are pictured on the left side of the card, and on the right a frame contains some eggs. Each small frame is connected by an arrow with a metallic dot. A symbol placed below the main picture has a matched symbol next to another metallic dot. If the points of the torch are connected by placing the plugs upon the correct dots a light flashes on.

Mothers were shown how the hen and eggs example worked and then allowed to choose and experiment with other picture pairs on the same card. When they understood the game they were shown the two other cards and told which one to use first. This was a set of pictures which matched containers with lids. However, the mother was given no directions about this card except that it was better to show the child how the game worked before handing over the torch. She was left to study the card while the child was withdrawn from class. A second card, with large and small varieties of different fish was available to the mother if the child wished to go on with the game after the first card. A time limit of 15 minutes was set for the taping of the mother child interchange. The observer, a graduate part-time research assistant, administered the interview and made notes during the taping session.

Since there was no test there was less constraint upon the parent to perform as well as a teacher. The general introduction to the games suggested a situation in which she was teaching the child how to play a novelty game. Although convergent, the game offered a greater variety of approaches than the eight block task, and self discovery was made possible by means of the torch.

At this stage it can be said only that the mothers and children appeared to enjoy this game and many wished to extend the time allowed.

Data is in coding stage at present.

General Comments

Subjective evidence abounds for the success of the outreach to parents:

- changes in teacher attitudes, particularly teachers who were reluctant to involve parents in the beginning, but became not only more accepting but more creative in their uses of help
- the tolerance by staff of many more mothers in the school environment generally
- the relaxed manner of mothers who dropped in for a chat, a consultation or to express their interest in what was happening in school
- the emergence of parent leadership in school and community activities
- the consistent attendance and involvement of twenty-two mothers as teacher helpers
- the request by mothers for instruction in structured language teaching methods
- general interest in community forums and parent requests for further community involvement (See Inservice Training p. 9)
- the request by the Principal for further Van Leer Research involvement in the development of the new preschool in 1979

Problems which were identified:

1. The need for greater support to teachers, especially new teachers, who undertake supervision of parents as teachers in their classrooms. While it is accepted that each teacher adjusts in a different way to parents it seems clear that some modification to classroom organisation and practice is required for most teachers. The question of curriculum can be considered in relation to parent involvement by planning ahead to incorporate some activity periods which require a greater amount of personal interaction and greater degrees of freedom of movement. More individualised work is possible when parents are present.

2. The need for greater support to parents by the teachers who involve them in activities. The parent is a learner in this situation. The one who will benefit most from the experience may be the parent with the least to offer, at least from the teacher's point of view. Confidence building in parents is the desired objective and will assist the teacher to obtain greater accord of the home and the school environment in the long term.

3. The need for involvement of teachers at all levels in parent workshops, so that anxieties about class work, homework etc. may be treated constructively in an activity setting. Ideally the atmosphere in workshops should be informal and problem centred. However, it should be recognised that parents have a contribution to make in their insights into childrens styles of thinking and their acceptance of some divergent routes to an objective.

13. ADVISOR WORKING WITH PARENTS AND CHILDREN IN THE PRESCHOOL

PART C

RESEARCH ACTIVITIES IN 1978

INTRODUCTION

Data collection during 1978 encompassed a very wide network of sources. Apart from the major testing sessions at the beginning and the end of the year (referred to in PART A), the purpose of which was to assess the overall school-related development of the children, data was collected on certain specific aspects of learning and development. Where it was considered appropriate, previous measures underwent refinement and were used again e.g. the Preschool Observation Scale was adapted for use in kindergarten and became the Kindergarten Rating Scale. The classroom process measure, PROSE, was elaborated in order to get an even clearer understanding of classroom processes.

Some new measures were developed to investigate areas considered crucial to classroom processes e.g. the Teacher Language Instrument (TLI) was designed and implemented for the first time in 1978. A schedule was devised for observing and categorising children's play activities. The results of a pilot study using this schedule are reported later in this section.

There was the usual ongoing process of less formal data collection by project staff and teachers, which served the dual purpose of evaluating programs and providing information which was used formatively in program development and implementation at the individual level.

Separate detailed reports for six of these areas of research are included here.

1. THE DEVELOPMENT AND ANALYSIS OF THE TEACHER LANGUAGE INSTRUMENT (T.L.I.)

1. Introduction

2. The Development of the T.L.I.
   - i) Categories and descriptions
   - ii) The unit of analysis
   - iii) The verification of the instrument

3. Collection of data

4. Analysis of data
   - i) The training of coders
   - ii) Analysis procedures

Figure 11 Teacher Language Instrument: Category Descriptions

Figure 12 Coding matrix for Teacher Language Instrument

The Teacher Language Instrument (T.L.I.) (see Figure 11) grew from a need to describe and analyse patterns of teacher speech. It is likely that the speech of teachers will vary from program to program. Some programs, such as the Behaviourist and Cognitive specify language styles and behaviours that suit the achievement of objectives in those programs. All four school-based programs emphasise the importance of language in promoting the cognitive development of the children. The T.L.I. was devised to examine the ways in which teachers' language differed in mode and function from program to program.

THE DEVELOPMENT OF THE INSTRUMENT

No existing instrument was suitable for this kind of analysis. There were comprehensive scales for general classroom observations, e.g. Stallings (1975) which were complex and did not give particular attention to teacher language. Other instruments such as the Angrist & Borke (1974) were useful for describing general categories of teacher behaviour which might be sampled. Barbara Tizard and her associates had developed a scale for care in residential nurseries. This instrument did have useful categories describing teacher or caretaker speech, but the situation in which it was used was not comparable with the present one, that of a sessional preschool. It was decided to develop a separate instrument.

i) Categories and Descriptions

The T.L.I attempts to define and describe two aspects of any single episode, its mode and its function. While the form of teacher speech might vary from program to program, the function of teacher speech will be affected by local contexts. The idea of functions of language as adopted by the present piece of research is based on that outlined by Michael Halliday, in 'Exploration in the Function of Language.'

Halliday's research, however, was based on investigation into the language of very young children. Observations at the preschool sites showed that exclusive categories for adult language could not be formed from Halliday's functions. In particular, the language of construction itself could not be defined under one functional category. Teachers used the language of instruction for regulatory and heuristic functions.

Following trial sessions in preschools in which all ongoing teacher verbal behaviour was coded, the mode and function categories were mapped onto a single matrix, so that any speech episode could be coded for both mode and function. (See Figure 12). There are five general modal categories of teacher language behaviour, i.e. statement, questions, imperatives reinforcers and facilitators. There were four general categories of function, i.e. regulatory, heuristic, social and administrative.

The modal categories were subdivided into specific language behaviours i.e.

Statement	questions	imperatives	reinforcers	facilitator
show	simple	command	general praise	affirm
tell	open	request	specific "	response
lead	socratic	greeting	negative	ignore

The function categories are subdivided into specific functions

regulatory	heuristic	social	administrative
motivate	evaluate	social-interaction	homekeeping
instruct	knowledge	personal	resource
control		imaginative	

Full descriptors of all those categories are listed in Figure 11.

ii) The Unit of Analysis

The unit of analysis, an 'episode' was developed following an examination of transcripts of teacher classroom verbal behaviour. As the T.L.I. classifies the mode and function of teacher language it was necessary that the unit of analysis incorporate both. This episode includes a single mode and a single function.

A new episode begins after a change in mode, and a change in function. A new episode also begins after a new utterance of the same mode in the same function, e.g. as in a series of discrete pieces of information.

iii) Verification of the T.L.I.

Following development of categories and descriptors, the instrument was trialled by a) coding transcipts of sample lessons; coding videotapes of sample lessons; c) visiting classrooms and coding all ongoing teacher verbal behaviour.

COLLECTION OF DATA

The data was collected on videotape at the four preschool sites during July 1977. Sound quality was ensured by the use of radio microphones. The events of the day were taped using time sampling procedures. Each teacher was filmed and her verbal interactions recorded in 10 minute segments. All contexts prescribed by the program e.g. small group/large group/individual interactions were taped. The effect of context on the mode and function of teacher language could then be assessed. Mid year taping was chosen because programs had been fully implemented, and because there were no other research activities going on at that time.

ANALYSIS OF DATA

i) Training of Coder

a) familiarisation with Descriptors of episodes and categories (modes and functions)

b) coding transcripts of sample lessons by mode; function and mode x function

c) coding videotapes of sample lessons by mode; function and mode x function

d) intra-rater reliability was monitored by asking the coder to code a number of sample lessons a second time

e) validitiy of coding was monitored by checking coding sheets of coder with those of trainer.

ii) Analysis Procedures

Frequency counts of teacher utterance episodes for mode; function and mode x function will be obtained.

This data will be analysed for all teachers in relation to differences in teacher talking style, program and situation; the specific variables being: site, sessions, place of observation, (inside/outside), group size, (small/large), and teacher stance, (formal - didactic/informal - non-didactic).

RESULTS

Data is at present being analysed, and results will be presented at a later stage.

In conclusion, it is hoped that the T.L.I. will serve a number of purposes:

a) to provide important empirical support for process data already collected by showing that teacher verbal behaviour differs between programs, and is in keeping with program practices and objectives.

b) to provide information on the relationship between teacher language and children's learning.

FIGURE 11: TEACHER LANGUAGE INSTRUMENT

Category Descriptors

A. Mode of Verbal Episodes

1. Statements:

SHOW: Teacher statements relating to the use of concrete materials are coded as 'show'. The statement may aim to demonstrate, illustrate, inform, explain, or promote understanding *with the aid of materials*. These statements may also be used to facilitate or elaborate the child's use of materials - e.g. block building, puzzles, felt board activities, etc.

'These are circles/ they are all different sizes/*
some are very big/'

'This hand holds the shape down on the table/ see how
I have drawn right around the outside of it/'

* The end of an episode is indicated by a slash, (/).

TELL: Statements which pass on information are coded as 'tell'. These statements may include narration or explanation. Intended outcomes are frequently in the area of cognitive development. The interaction, however, *does not include the use of materials*.

'Flowers grow everywhere/ there are many different
kinds of flowers/'

'Jillian is going to be doing chalk painting/ wet chalk
painting for drawing/ and I am going to do special
things with the girls and boys in my group/'

LEAD: Statements made as the adult and pupils are performing the same verbal activity under the adult's direction are coded as 'lead.' The teacher and children may be singing a song, reciting a rhyme or counting together, for example.

2. Questions:

SIMPLE QUESTION: The teacher asks for recall of material already known, usually in a yes/no answer. This category does *not* include comments in question form.

* 'Have you had your juice?'

' Do you have a pencil?'

'What colour is your jumper?'

OPEN QUESTION: The teacher is putting a question to invite the expression of feelings or opinion on the part of the child. The child may develop on the question as he sees fit, and divergent responses are permissable. The utterance may be phrased in statement form as well as question form.

* 'What did you do over the holidays?'
'Tell me why you like that story.'

SOCRATIC QUESTION: The teacher questions the child with the object of helping him to solve a problem or clarifying his ideas. A series of questions can be asked sequentially to achieve this end.

'What's the sun for?'
* 'Where is it?'
'Where do you find stars?'
'When do you see them?'
'When does it get light?'
'Where do you get light?'

3. Imperatives:

All utterances in this category call for a response from the child, either verbal or non-verbal. If a reply was not forthcoming, the adult would most likely re-phrase the imperative. Responses would range from a smile (in response to a greeting) to immediate and obvious modification of behaviour, (in response to a command).

COMMAND: The teacher delivers the imperative in the form of a command. This utterance, although at times direct, contains no negative.

* 'Sit up straight'
'Put the puzzle away'
'Sit down on that side'

REQUEST: The teacher delivers the imperative in the form of a question.

* 'Would you please close the door?'
'Will you find me something blue, please Joanne?'

GREETING: This category is used for all comments, greetings and personal compliments.

* 'Hullo'
'What a nice day it is'
'You look very pretty in red, Sue'

4. Reinforcers: (contingent upon behaviour by the child)

GENERAL PRAISE: Teacher statements of approval which do no specifically state what behaviour is being praised.

'That's nice'
'Clever boy'
'Good'

Figure 11 cont'd ...

SPECIFIC PRAISE: Teacher statements of approval which name the response being praised.

'Your're a good girl for putting the blocks away'
'I like your story about your trip, Sue'

NEGATIVE: The teacher responds to incorrect work or inappropriate behaviour through disapproval or corrective feedback. The feedback is phrased in negative statements. The statement could be posed to an individual or a group of children.

'Don't run in the preschool'
'You cannot play in the doll's corner, Jane'
'You didn't cut along the line'

5. Facilitators:

AFFIRMATIVE: This category is used for utterances which provide feedback to the child, confirming a correct response in a 'neutral' way, (e.g. repeating a child's answer), or providing support for his intentions. This category is also used for undirected remarks by the teacher, (including self affirmatives).

'All right'
'That's it'
'Well never mind'
'I see'
(ch: 'I can cut out') t: 'Yes, you can'
t: 'Which hand do you hold your crayon in?
(ch: 'That hand') t: 'That hand,/ O.K.'

RESPONSE: This category is used for responses to a child's question, or to a situation initiated by the child.

'Yes, you can cut around it now'
'I'll give you some help'

IGNORE: The teacher ignores the efforts of a child or group to gain her attention, and no response is forthcoming to complete the interaction.

B. Function of Verbal Episodes

1. Regulatory:

MOTIVATE: Teacher utterances designed to arouse curiosity, stimulate interest, or encourage child to undertake, or persist in an activity.

'We are going to do special stories about red things'
'You really are cutting that so carefully,John,/ good boy/'
'And when you have cut it out very well it will be your own red shape'

Figure 11 Cont'd...

INSTRUCT: Teacher utterances aimed at facilitating the completion of tasks by children, or maintaining the smooth running of the class, by giving instruction for tasks and other activities.

'Then you take the scissors/ and cut around this big shape/'
'Write your name on the back of the paper'
'The 'Seals" are going to play with blocks or jigsaws'

CONTROL: Utterances used by the teacher to control or manage the child's behaviour are coded 'control.' The child's response may be verbal or non-verbal. This category includes a wide range of situations such as when the teacher is being permissive, e.g. giving the child a choice between a number of activities, or commanding that a particular activity begin or cease.

'Sit down'
'Are you going to the book area first?'
'Where do you think you might go to play after you get dressed up?'
'You might like to get one of the dolls'

2. Heuristic :

EVALUATE: Included in this function are all utterances designed to assess a child's competence at a verbal or non-verbal task. Teacher language serving an evaluative function often requires information, or the successful manipulation of materials as a response.

'Show me how you can cut'
'What colour is the wet chalk?'
'Is there anything else you can tell me about the picture'
'Can you hold up four fingers?'

KNOWLEDGE: Teacher language which aims to extend and improve the child's knowledge or understanding about the world or events are coded within the knowledge function. They can range from utterances which are purely descriptive to those which require logical operations, e.g. cause and effect and condition statements. The teacher may be providing information, or using a probe to get the child to look at what he knows in another way, and to make inferences from that. Improvement in the child's cognitive functioning is an expected outcome.

'An elephant has a really long curling nose/ that picks up his dinner/ and puts it in his mouth'
'There is someone else who wears red trousers/ someone
'who comes at Christmas time/ and says Ho,Ho,Ho'

Figure 11 Cont'd...

3. Social:

SOCIAL INTERACTION: The teacher's utterances are designed to initiate or promote social interaction and co-operation, or to suggest how a dispute may be avoided or resolved. This category is also used for maintaining a warm and pleasant classroom climate.

'That's a pretty dress, Sue'
'Tell me all about your pet cat, Bill'

PERSONAL: Included in this function are examples of the language used in the projection of aspects of the personality of the teacher, which are relevant to the situation, e.g. the exertion of personal authority, the relation of personal anecdotes, the expression of a personal opinion, preference, interest or pleasure. This category also includes those utterances which are part of the teacher's own personal style, or a habit.

The teacher on completion of marking the roll says to herself 'O.K., finished'

'I think you get the sweets when you have been a good boy'
'I like peanut butter and honey together'

IMAGINE: Language belonging to this function has, as its aim, the maintenance of role/fantasy play with a child or group of children. The teacher must be involved in the game, and not directing it. The teacher and children have equal status in the game.

'This is a delicious, (pretend), cup of tea. Can I pass you the sugar, (pretend)'

4. Administrative

HOUSEKEEPING: the teacher is carrying out a routine enquiry, marking the roll, supervising pack-away time, answers phone etc.

'Matthew is not here'
'Who ordered lunch?'

RESOURCE: The purpose of statements having a resource function is to inform of the availability of goods and services, or to indicate that the teacher is going to provide some service or goods.

'I'll show you how to trace'
'You've got a piece of paper on your table'
'The paint is over in the corner'

FIGURE 12: CODING MATRIX FOR TEACHER LANGUAGE INSTRUMENT

Teacher: School: am/pm
Date: Tape No: To: Duration:
Group size: small/large
Teacher size: formal-didactic / Informal-non-didactic
Comments:

MODE	FUNCTION															
	REGULATORY				HEURISTIC			SOCIAL				ADMINIS-TRATE			TOTAL
	Motivation	Instruct	Control	TOTAL	Evaluative	Knowledge	TOTAL	Social - Interaction	Personal	Imagine	TOTAL	House-keeping	Resource	TOTAL	
1. STATEMENT															
Show															
Tell															
Lead															
TOTAL															
2. QUESTIONS															
Simple															
Open															
Socratic															
TOTAL															
3. IMPERATIVES															
Command															
Request															
Greeting															
TOTAL															
4. REINFORCERS															
General Praise															
Specific Praise															
Negative															
TOTAL															
5. FACILITATORS															
Affirmative															
Response															
Ignore															
TOTAL															
TOTAL															

2. Project Evaluation : Mathematical Thinking

In addition to the achievement tests which include some mathematical tasks, it has been project policy to attempt an evaluation of mathematical behaviour in a set of problem situations. Each year the tasks must be upgraded in difficulty and/or complexity. Thus the major domains of logical activity are represented by a different set of tasks from those attempted in 1977 (Annual Report, p.43).

No pretest was attempted but data were collected at the end of the year from program children in the core group, and from a group of non-preschoolers (total N=83). The testers assisted in the trialling of instruments and the development of probes in response to alternative answers. Tester bias was controlled by proportional testing at each school by each of the three testers, all of whom were graduates with a major in Psychology, but were not project staff. They worked closely in consultation with one another to standardise observations of behaviours and recording methods.

The whole set of tasks took approximately 1½ hours to administer to each child and this occurred in three separate sessions. A games atmosphere was induced in part by the materials and in part by the style of testing.

The aim of the tasks was to determine the strategies and abilities of the children in solving simple problems in multiple seriation, measurement and number, using concrete objects. In addition one task tapped the representation and organisation of memory for pattern in which colour, shape and number could provide cues. A new spatial task tested the child's concept of symmetry in a plane figure. Inductive reasoning and inference were tapped in the final flotation problem, but this was administered to a smaller number of subjects than those who attempted the other tasks.

1. Representation and Memory

The child was shown an arrangement of solid wooden coloured circles and squares on a card and asked to reproduce it on another card, after a short inspection. A delayed reconstruction was also required at the end of the task 2. The tester illustrated the child's arrangement on the record sheet. During reconstruction the model was hidden from view (Rosskopf et al., 1970, p.131).

2. Reproduction and rotation of a Matrix

This task was adapted from the work of Steiner (1974). Its purpose was to test the child's capacity to classify and order a set of 16 circular blocks along two dimensions. These were of dimensions and colour tone. After reproduction there were 3 rotation tasks which required the child to transpose the matrix in space. Scoring grids were similar to those used by Steiner.

3. Number Operations

a) Addition, division and remainder problems were presented concretely using toy trucks with various numbers of seats in which wooden "men" could be placed. In the addition problem sufficient trucks were available to reach the solution concretely, but only one truck was used to represent the problem components in the division and remainder tasks. This made the latter more difficult because they were more abstract. (Figure 13).

b) Four number pattern problems were set up on abacus type apparatus consisting of vertical rods set into stands in groups of 3. Plastic rings could be placed on the rods. The child was required to copy and to predict arrangements of the rings, and finally to multiply an arrangement.

c) Number conservation: using the plastic rings the classic conservation task (Piaget 1952) was presented to the child. It's inclusion was intended to show the increase, if any, of conservers since the post-test in 1977 (Healey, 1978, p.42).

4. Measurement

a) The child was given an uneven arrangement of 12 blocks in 4 piles and asked to rearrange them so that the 4 "towers" were the same height. Number of moves and types of strategies were observed. (Payne ed. 1975)

b) Pairs of cardboard strips were arranged on a card. Each pair was equivalent in length but differed from the other pairs. The arrangement varied the orientation of the pairs. The child was asked to judge which strip was the longest, the shortest and which pair was the same in length. A grooved measuring rod was supplied after the initial selection and the child was asked for evidence of correctness of judgement (Nelson and Liedtke, 1972).

5. Symmetry (see Figure 14)

After practice on transparent folding models, the child was shown six different plane figures, all of which were bilaterally symmetrical. Only one figure was displayed at a time and the child was asked to draw the line on which he would fold the figure to make the sides match, as they did in the models. (Rosskopf ed. 1975).

6. Flotation

This classic Piaget task (Inhelder and Piaget, 1958) was given in a pilot study conducted across sites in term I. This led to the modification of materials and probes . Its objective was to assess the ability of the children to abstract a rule after classifying objects which did or did not sink, and to infer from the information to new situations.

The data has not yet been analysed.

FIGURE 13: NUMBER OPERATIONS I

A. ADDITION: 4 + 2 = 6

Q Can you find another truck which can take all of these men?

Correct ☐ Selects 4 truck ☐

Alternative response: _____

B. DIVISION 12/4 = 3

Q. How many truck like this one will we need to get all of these men to the football match?

Correct ☐

Alternative response: _____

Q. How many men will fit in this truck?

Correct ☐

Alternative response _____

Q. How many more trucks will we need? (i.e. trucks like this)

Correct ☐

Alternative response _____

Alternative Q. How many trips would this truck have to make?

Correct ☐

Alternative response _____

C. REMAINDER: 10/4 = 2 + 2 over

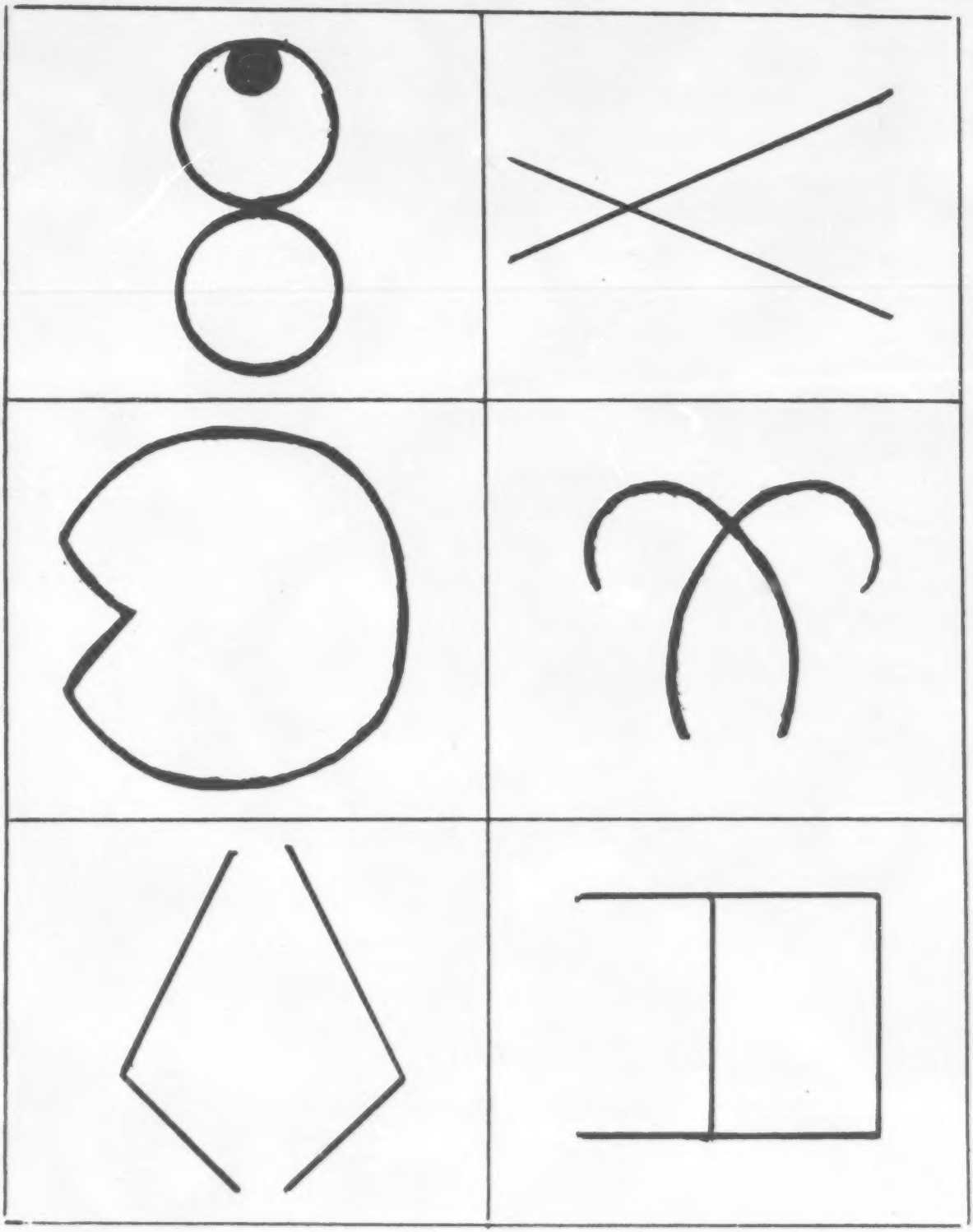
Q. How many truck like this one?

Correct ☐

Alternative response _____

Reaches remainder by exclusion ☐

FIGURE 14: SYMMETRY



3. PRESCHOOL OBSERVATION SCHEDULE (POS)

A. PURPOSE OF THE INSTRUMENT

One of the areas for evaluation that was outlined in the original evaluation of the Project (Ball and Braithwaite, 1975) was that associated with the systematic collection of information about selected children's behaviours in the classroom. The Preschool Observation Schedule was designed for the teachers to record certain individual children's behaviours over a two-monthly period. The teachers had expressed a need for feedback on the following variables: Creativity, Attitude to School, Social behaviour, Emotional behaviour, Language and Perceptual-Motor development. These variables were chosen by the teachers as having the greatest potential influence upon the children's school performance. The teachers were requested to rate children against a suggested criteria drawn from these areas so as to gain a measure of change in children's behaviour over time. Theoretically it was argued that a focus on change should enable research personnel to study a school profile and so generate predictions about various children's behaviours with data collected at differing points of time over the year.

As was mentioned in the Third Annual Report, the instrument was used on six separate occasions by the preschool teachers and the following conclusions emerged from the Preschool data.

B. CONCLUSIONS DRAWN FROM THE 1977 RESULTS

The preschool teachers used the instrument in 1977 and the following conclusions were drawn from the results:

a) The instrument was useful as a monitoring device to record and detect any change in selected child behaviours.

b) The inter-rater reliability data indicated that two or more raters could use the instrument with a reliable degree of consensus. The stability indicator suggested that the instrument could be consistently used by the same rater but that this stability decreases the longer the time span between ratings.

c) Four of the six hypothesised dimensions consistently emerged from the ratings collected at four independent sites. The four dimensions were Language, Achievement, Anxiety and Prosocial (versus Aggressive) behaviours. Two dimensions, Dependency and Creativity, failed to have the same consistency.

d) Language and Achievement behaviour ratings were normally distributed between and among programs. Over the year the teachers rated a gradual mastery of the various Language and Achievement objectives found in each preschool program.

e) Occurrence of aggressive behaviours decreased over the year; a fact supported by concurrent classroom observational data.

f) Children shifted away from a passive dependency on adults at the beginning of the year toward a more active and assertive attachment to their peers.

g) Creative behaviours on the part of children occurred infrequently as rated by the teachers. Although the instrument detected changes in language and prosocial behaviours over the year such changes in creative behaviours were not rated by the teachers.

h) The instrument provided valuable feedback to teachers as it ensured that they considered the behaviours of all the children in their class. Through using the instrument the teachers had to consider children's developmental behaviours individually for at least six times during the year. As a result the quiet compliant child or the independent one who may be overlooked by the teacher was assessed along with the 'stars'.

c. TWO COMPARISONS MADE WITH THE 1978 DATA

The instrument was also used in Kindergarten to maintain a longitudinal record of the same behaviours. Although the name of the instrument was changed to the Kindergarten Rating Scale (KRS) the behaviours remained unaltered. The point of preserving the same behaviours was to attempt to detect any developmental changes in the manifestation and frequency of these behaviours. For example, it was established that by the end of preschool, aggressive behaviours occurred less frequently. The question now asked was did these behaviours continue to diminish to a point of extinction in kindergarten, or was there an increase in these behaviours. Or a further example, creative behaviours occurred infrequently and there was little change over the preschool year. Will there now be an upsurge in these behaviours in kindergarten suggesting that, developmentally encouraging creative behaviours with preschool children is inappropriate? The main thrust of maintaining the same behaviours was to demonstrate empirically their relevance developmentally to kindergarten and preschool children. This strategy was opted for rather than dismissing behavioural items 'a priori' without research evidence. The same argument will be used to retain the structure of the instrument in First class.

The instrument, then, was used in kindergarten to maintain a longitudinal record of the children's behaviours. Not only could further change (if any) be monitored but also differences (if any) between preschoolers

and nonpreschoolers might be detected.

Two comparisons have been made using the 1978 date:

i) Differences in behaviours between preschoolers and nonpreschoolers were examined

ii) Changes in behaviours over the kindergarten year were explored.

i) Preschoolers v. Nonpreschoolers

From each site* 12 preschoolers and 12 nonpreschoolers were selected at random and the results of this comparison are presented in Table 9.

TABLE 9: DIFFERENCE BETWEEN 12 PRESCHOOLERS AND 12 NONPRESCHOOLERS ON FIVE DIMENSIONS AS RATED BY TEACHERS IN 1978

Program		Cognitive		Competency		Behaviourist		Homebase	
		Mar.	Dec.	Mar.	Dec.	Mar.	Dec.	Mar.	Dec.
Language	PS*	3.4	3.4	3.7	3.7	3.3	3.4	3.0	3.4
	NPS**	2.9	3.3	2.6	3.2	2.9	3.3	3.6	4.3
Prosocial	PS	3.8	3.6	4.0	3.6	4.5	4.5	3.9	4.2
	NPS	3.8	3.9	4.2	3.5	4.3	4.2	3.8	3.8
Aggression	PS	2.3	2.7	2.2	2.9	1.7	1.9	1.9	1.9
	NPS	2.2	2.3	2.4	2.8	2.0	2.0	2.1	2.1
Anxiety	PS	3.0	2.5	2.3	2.3	1.8	2.1	2.4	2.5
	NPS	3.0	2.5	2.8	2.8	2.6	2.4	2.2	1.8
Achievement	PS	3.8	3.7	4.1	3.4	4.0	4.3	3.3	3.7
	NPS	3.4	3.8	3.2	3.4	3.8	3.9	3.9	4.0

*PS = Preschoolers **NPS = Nonpreschoolers

*The Contemporary Australian program has been omitted because the sample size of the nonpreschoolers was too small for statistical purposes.

From Table 9 it can be seen that no consistent pattern of differences emerged across all programs. Though perhaps a few tentative interpretations may be made of the school-based programs, the home-based program confounds any possible generalisation. For example, in March, the children coming up through the school-based programs were rated by the teachers more favourably on almost every dimension when compared to the nonpreschool children (there are two exceptions: the preschoolers in the Cognitive program are rated higher on Aggression, and the preschoolers in the Competency program are rated lower on Prosocial). However, this pattern did not emerge for the home-based program. The home-based children were rated by their kindergarten teachers as being less fluent in language, less achievement oriented, and more anxious than their nonpreschool counterparts.

By December, the results are even more confounded. In some programs the preschoolers continue to retain their more favourable ratings whereas in other programs the position has been reversed. For example, in the Behaviourist program the preschoolers have been rated higher on Language, Prosocial and Achievement behaviours while at the same time being rated lower on Aggression and Anxiety behaviours. This pattern would be anticipated if preschoolers were to maintain their 'head-start'. However, in the other Programs the same outcome did not emerge. Overall, the one very tentative conclusion to be drawn was that Language is the only dimension distinguishing school-based preschoolers (as distinct from home-base children) from nonpreschoolers at the end of kindergarten.

ii) Change in Behaviour from March 1978 to December 1978

Reference is made to Figure 15 to illustrate teacher's ratings of change in children's behaviours from March 1978 to December 1978,

It can be seen that the dimensions of Anxiety and Achievement have changed in the anticipated direction. That is, children became less anxious and more motivated as the school year progressed. With the Language and Prosocial dimensions no apparent global change had occurred. The Aggression dimension, however, has moved in an unanticipated direction. The teachers rated an increase in aggressive behaviours over the year.

A breakdown of the general pattern of change is presented in Table 10.

It can be seen from this Table that the Home Base program's results tend to mask the otherwise unanticiapted direction of change. Generally, with the school-based programs the children were rated as becoming more aggressive and more anxious. Their prosocial and achievement behaviours tended to decline while their language behaviours certainly did not improve.

Some educationalists argue that 'disadvantaged' children require a structured learning situation in order to derive educational benefits from school. The present results clearly do not support this hypothesis especially in terms of preschool and kindergarten aged children. The move from the relatively unstructured preschool setting to the formal, structured kindergarten setting appears to have led to more aggressive and more anxious behaviours over the school year. That the kindergarten setting is relatively more formal is attested to by external observational data (PROSE) gathered during the year. Such an artifact as the increased ratio of children to adults (in preschool 10 children to 1 adult; in kindergarten 30 children to 1 adult) may be a critical factor leading to the formal approach adopted in kindergarten. Whatever the reason, it appears that a formal situation is not beneficial. This is certainly the case for kindergarten aged children.

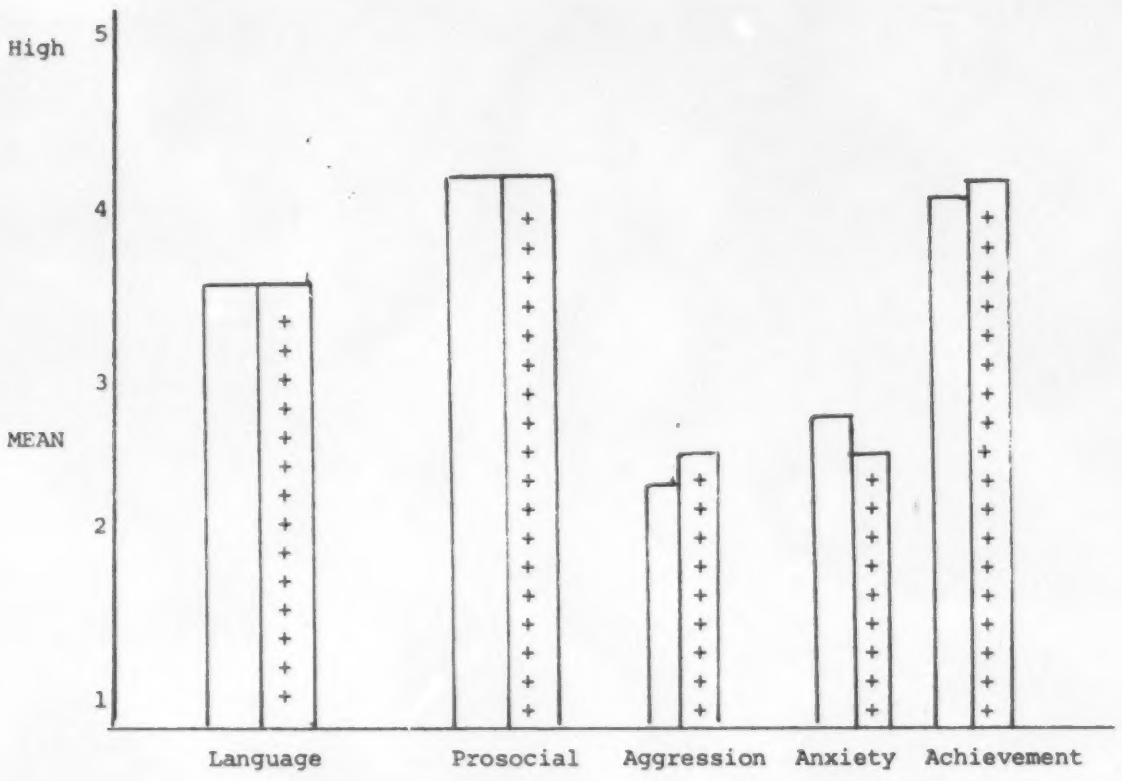


FIGURE 15: COMPARISON OF TEACHERS' MARCH & DECEMBER 1978 RATINGS ACROSS PROGRAMS

Number of Subjects = 214 169 March

TABLE 10: MEANS FOR FIVE DIMENSIONS FOR EACH PROGRAM IN MARCH 1978 and DECEMBER 1978

Program	Cognitive Program		Competency Program		Contemporary Program		Behaviourist Program		Home Base Program	
Month	Mar. '78	Dec.'78	Mar. '78	Dec.'78	Mar.'78	Dec. '78	Mar.'78	Dec.'78	Mar. '78	Dec.'78
Language	3.3	3.2	3.3	3.2	4.0	3.7	3.1	3.7	3.3	3.6
Prosocial	3.8	3.7	4.0	3.7	4.3	3.7	4.5	3.8	4.0	4.2
Aggression	2.4	2.9	2.1	2.5	2.4	3.0	1.8	2.9	1.8	1.9
Anxiety	2.8	2.6	2.4	2.7	2.4	2.9	2.1	2.8	2.3	2.0
Achievement	3.7	3.7	3.6	3.2	4.0	3.8	3.6	3.8	3.6	3.9
No. of Chn.	62		27		24		48		53	
Stability	0.77		0.68		0.75		0.74		0.84	

CHILDREN'S PLAY

INTRODUCTION

Major aims of each program of the Mt Druitt Early Childhood Project have focused upon the cognitive and social development of disadvantaged children. To this end a variety of evaluative measures have been employed to assess the extent to which these aims have been achieved. The present study seeks through analysis of the social organisation and cognitive function of children's play to provide an additional dimension for this evaluation, relating to children's play activities.

Early studies of children's free play preferences often focused upon the formulation of social play hierarchies, the most prominent results being those of Parten (1932) who found that social participation among preschoolers increased with the child's age. Parten defined six sequential social participation categories: unoccupied behaviour, solitary play, on-looker behaviour parallel play, associative play and co-operative play. More recent investigations have attempted to use Piaget's classification of three successive stages according to the degree to which play remains purely sensori-motor or has some bearing on thought itself. An adaptation of the Piagetian categories by Smilansky (1968), using the categories: 'functional play, constructive play, dramatic play, and games with rules, has proved useful in a number of important studies. Rubin (1976, 1977), in particular, has used a combination of the Parten and Smilansky categories for observation of play behaviours of middle and lower-class preschool children. He reports that middle-class preschoolers engage in significantly less parallel and functional play, and significantly more associative-constructive and co-operative-dramatic play than lower-clas preschoolers. It was thought that the Parten-Smilansky categories could be used to evaluate the play behaviours of the Project children.

The present study sought to examine preschool-non-preschool, program and sex differences in the play behaviour of Kindergarten children in Project classrooms.

Method

Subjects: Ten preschool and five non-preschool boys and girls from each of the five program kindergarten classes were randomly selected from the core group of children being studied in the PROJECT.

Procedures

Pilot studies were conducted to determine the size of groups to be studied, the materials to be used by the children and the duration of the play period. Following the observation of play behaviour in groups ranging in size from two to six, it was decided that a group size of five gave greatest opportunity for combinations of solitary, parallel and co-operative play. Materials included books, modelling clay, various kinds of construction equipment and dramatic play props commonly found in Kindergarten classes, were used by trial groups of kindergarten children in order to assess their 'child appeal'.

Materials used in this study were: plasticene, crayons, plain and coloured paper, paste, scissors, blocks, 'suction' construction set, plastic foam shapes puzzle, picture books, a set of nurses or doctors aprons and headbands, a medical kit equipped with bandages, a stethescope, thermometer, etc., glove puppets and small puppets suspended on elasticised thread, and several cardboard boxes large enough for children to crawl inside.

Observations

Children in groups of five (preschoolers and non-preschoolers were grouped separately) played with the toys in a room which was set aside for this purpose, for a period of twenty minutes. The play behaviour of all children was videotaped, and their conversations recorded on audio tape. The children paid little or no attention to the camera, which was unobtrusively positioned. Observations were recorded at each site in March 1978 and in November, 1978.

Data Analysis

The data was analysed on both social and cognitive dimensions, using a modification of Parten's and Smilansky's category systems as follows:

SOCIAL ORGANISATION CATEGORIES: Unoccupied, Solitary Play, Parallel Play, Associative Play, Co-operative Play.

COGNITIVE FUNCTION CATEGORIES: Functional Play, Constructive Play, Symbolic PLay, Dramatic Play, Play with Rules.

Results

A series of 1 (preschool) x 2 (sex) x 5 (program) ANOVAs were conducted for each of the Social Organisation and Cognitive Function Categories independently on both pre and post tests. The following Main Effects were significant at the .05 level or better:

Program DIfferences

Pretest: On entering kindergarten children in some programs displayed differences in the kinds of Social Play they engaged in, particularly in Parallel, Associative and Co-operative Play behaviours; and differences in type of Cognitive Play in all the Cognitive Function Categories of Play Behaviour except Play with Rules.

Post-Test At the end of kindergarten, children in some programs displayed differences in the amount of time spent in Parallel Play; and in Constructive, Symbolic and Dramatic Play.

Sex Differences

Pretest: On entering kindergarten sex differences were apparent in the amount of children's Solitary play behaviours.

Post-Test: At the end of kindergarten sex differences were displayed in the amount of Parallel play behaviours of the children.

School Experience Differences

Pretest: On entering kindergarten, children who had been to preschool displayed differences in the amount of co-operative play behaviours from those who had not been to preschool.

Post-Test: At the end of kindergarten, children who had been to preschool displayed differences in the amount of time they were unoccupied and in the time spent on Functional and Symbolic behaviours.

CONCLUSION:

It is apparent that participation in a preschool program may influence the social organisation and cognitive function of some play behaviours of children. The particular program followed at preschool, and to a lesser extent, the Infants school may influence both the social organisation and cognitive function of children's play.

These conclusions are necessarily tentative as the significant interaction effects have not yet been analysed.

5. PARENTS' PERCEPTIONS OF PROGRAMS (NOV. 1978)

Indicative of the broadening base of the Project from curriculum oriented issues to bolder social/community contextual ones, is change in the type of information sought from parents.

The earlier P.E.P.I. instrument (see separate paper) was designed to evaluate changes in children's behaviours as 'outcomes' of the different programs - to assess the impact obvious outside the school to their parents it was child focussed and treated children;s behaviours somewhat independently of familial and schooling contexts. The present instrument (PAPP) attempts to be multi-faceted in attending to parents perceptions, a range of issues within the context of the school program.

Instrument

The instrument has four sections focussing on -

A. Communication between parents and schools

B. Parents at school (involvement)

C. Parents perceptions of programs (attitudes)

D. Parents as teachers (skills/styles)

A. Communications

Parents' assessments of their children's progress and the viability of school programs is as much dependent upon the context in which to gain information and form attitudes as it is on a child's behaviour, judgement and skills.

The particular behaviours noticed in PEPI), therefore, represent parents' perceptions within some value context and implicit theory of schooling and the modification of this context and understanding of schooling functions must be a significant part of innovative programs.

In many ways, the various programs have attempted to cope with these issues by involving parents in decision-making and implementation of decisions. This first section of the interview attempts to survey the communication system from parents' perspectives.

B. Parents at School

The direct involvement of parents in programs is a problematic issue, with both advantages and disadvantages for both parents and teachers. Information about involvement, from the parents' point of view mostly comes only from those who are happily and regularly participating and little is known about their attitudes to this new possibility/responsibility.

This section of the interview attempts to survey the context of involvement - attitudes, quality and quantity of involvement.

C. Parents' Perceptions of Programs

From the PEPI interviews general issues emerged as significant in the value contact of parents. Their satisfaction with a program was based on a conglomerate of children's satisfaction, performance in certain content

areas, social/behavioural styles and teaching mode/procedures.

This section of the interview attempts to track global perceptions of programs - degree of satisfaction, children's progress in basic content areas and behavioural style as well as classroom mileau.

D. Parents as Teachers

In relation to parent's satisfaction with the emphasis of program in terms of content and style parents' own reactions were sought - did they actively set about teaching certain skills or behaviours and how did they go about it, and were they satisfied with the results?

Procedure

Independant interviewers met with parents at school or home to complete the survey. The response rate (kept appointments) was lower than for the PEPI interviews at preschool. (However, parents of preschool children were more likely to keep appointments). Particular or urgent issues arising from the interviews were directly referred to teachers or other agencies. A meeting of all teachers was held to discuss general issues arising from the survey, especially the need to develop more effective communication with parents and the significance for program implementation of the impact of parent expectations and perceptions.

Tables of frequencies of responses school by school have been prepared for schools while detailed analysis of the results is ongoing. Preliminary statistical analyses have not proven sufficiently useful (and further analyses are underway) - to be reported separately.

P.A.P.P.

TABLE 11 FREQUENCY OF PARENTS' RESPONSES

			PROGRAM				
			Bidwill	Whalan	Mt Druitt	Madang	Dawson
A.	COMMUNICATION BETWEEN PARENTS AND SCHOOL						
1.	How do you mostly find out about what is going on at school?	notes	37.5	18.2	18.8	28.6	60.0
		contact	12.5	22.7	62.5	35.7	20.0
		children	43.8	59.1	18.8	35.7	20.0
		newsletter	6.3	0	0	0	0
2.	Do you get much information from:						
	(a) your child	not much	6.3	4.5	25.0	28.6	25.0
		some	43.8	22.7	43.8	21.4	40.0
		a lot	50.0	72.7	31.3	50.0	35.0
	(b) other parents	not much	68.8	86.4	31.3	71.4	45.0
		some	25.0	13.6	37.5	21.4	40.0
		a lot	6.3	0	31.3	7.1	15.0
	(c) teachers	not much	56.3	27.3	18.5	35.7	25.0
		some	25.0	22.7	31.3	42.9	50.0
		a lot	18.8	50.0	50.0	21.4	25.0
	(d) visiting the school/observing	not much	68.8	27.3	12.5	21.4	30.0
		some	18.8	27.3	25.0	42.9	35.0
		a lot	12.5	45.5	62.5	35.7	30.0
	(e) notes from the school	not much	12.5	13.6	18.2	14.3	5.0
		some	18.8	27.3	25.0	14.3	20.0
		a lot	68.8	59.1	56.3	71.4	75.0
	(f) other ???		43.8	81.8	87.5	91.9	60.0
			56.3	18.2	12.5	7.1	40.0

TABLE 11 cont'd...

			PROGRAM				
			Bidwill	Whalan	Mt Druitt	Madang	Dawson
3.	Do you get enough information about how your child is getting on at school?	not much	50.0	18.2	18.8	42.9	15.0
		some	25.0	9.1	43.8	14.3	20.0
		a lot	25.0	72.7	37.5	42.9	65.0
4.	Do you get enough information about how to help your child with school work?	not much	62.5	40.9	56.3	57.1	30.0
		some	31.3	27.3	31.3	21.4	25.0
		a lot	6.3	31.8	12.5	21.4	45.0
5.	Do you get enough information about special help/services you can get for your child? (counselling etc)	not much	56.3	59.1	50.0	42.9	70.0
		some	18.8	22.9	43.8	42.9	25.0
		a lot	25.0	18.2	6.3	14.3	5.0
6.	Do you get enough information about things you can do for/with your child at home? (things to get, do)	not much	62.5	54.5	50.0	57.1	50.0
		some	18.8	13.6	18.8	14.3	15.0
		a lot	18.8	31.8	31.3	28.6	35.0
7.	Do you get enough information about what your child is taught?	not much	37.5	22.7	43.8	57.1	30.0
		some	43.8	31.8	31.3	7.1	25.0
		a lot	18.8	45.5	18.8	35.7	45.0
8.	Do you get enough information about how your child is taught?	not much	18.8	18.2	6.3	7.1	5.0
		some	37.5	27.3	43.5	35.7	30.0
		a lot	43.8	54.5	50.0	57.1	65.0
9.	Do you get enough information about what's happening at the school?	not much	18.8	18.2	6.3	7.1	5.0
		some	37.5	27.3	43.5	35.7	30.0
		a lot	43.8	54.5	50.0	57.1	65.0
10.	Do you get enough information about school system works to be able to help/make decisions about your child? (to repeat, learn language)	not much	68.8	59.1	56.3	57.1	55.0
		some	12.5	13.6	31.3	21.4	35.0
		a lot	18.8	27.3	12.5	7.1	10.0

TABLE 11 cont'd...		PROGRAM				
		Bidwill	Whalan	Mt Druitt	Madang	Dawson
11. Is the information you get not much use to you for understanding and making decisions about your child?	not much	68.8	45.5	43.8	57.1	20.0
	some	18.8	31.8	12.5	21.4	40.0
	a lot	12.5	22.7	18.8	7.1	15.0
12. Has the teacher/school asked for your opinion on school issues?	not much	75.0	68.2	75.0	64.3	75.0
	some	25.0	13.6	18.8	21.4	15.0
	a lot	0	18.2	6.3	7.1	10.0
B. PARENTS AT SCHOOL						
1. Do you get enough chance to talk to your child's teacher?	not much	50.0	13.6	31.3	28.6	15.0
	some	37.5	13.6	12.5	21.4	25.0
	a lot	12.5	72.7	56.3	50.0	60.0
2. Do you get enough chance to be in the classroom?	not much	62.5	27.3	31.3	35.7	40.0
	some	6.3	13.6	18.8	14.3	5.0
	a lot	31.3	59.1	50.0	50.0	55.0
3. Do you get enough chance to participate in school activities?	not much	62.5	36.4	12.5	50.0	35.0
	some	6.3	13.6	18.8	0	20.0
	a lot	31.3	50.0	68.8	50.0	45.0
4. Does the teacher/school contact you often enough?	not much	43.8	50.0	56.3	50.0	30.0
	some	50.0	22.7	25.0	35.7	25.0
	a lot	6.3	27.3	18.8	14.3	45.0
5. Does the teacher/school involve you?	not much	56.3	36.4	25.0	35.7	20.0
	some	43.8	59.1	75.0	64.3	70.0
	a lot	0	4.5	0	0	10.0

TABLE 11 cont'd...

		PROGRAM				
		Bidwill	Whalan	Mt Druitt	Madang	Dawson
6. Have you been personally invited to come to the school this year?	no	50.0	9.1	12.5	28.6	10.0
	yes	50.0	90.9	87.5	71.4	90.0
(a) How many times?	0	50.0	9.1	18.8	28.6	10.0
	1	12.5	18.2	43.8	7.1	35.0
	2	6.3	36.4	25.0	14.3	15.0
	3-5	12.5	36.4	12.5	35.7	40.0
	6-10	18.8	0	0	7.1	0
	10	0	0	0	7.1	0
7. Have parents been invited to come to the school this year?	no	6.3	4.5	6.3	7.1	0
	yes	13.8	95.5	93.8	92.9	100.0
(a) How many times?	0	6.3	4.5	6.3	14.3	0
	1	31.3	13.6	12.5	7.1	5.0
	2		31.8	12.5	14.3	15.0
	3-5	31.3	27.3	31.3	14.3	30.0
	6-10	18.8	9.1	37.5	14.3	35.0
	10	12.5	13.6	0	35.7	15.0
8. How many times have you been to the school?	0	75.0	77.3	31.3	64.3	20.0
	1	18.8	0	31.3	14.3	55.0
	2	0	9.1	31.3	0	15.0
	3-5	0	4.5	6.3	7.1	5.0
	6-10	0	4.5	0	14.3	5.0
	10	6.3	4.5	0	0	0
(a) Last year	0	6.3	9.1	12.5	21.4	0
	1-5	62.5	22.9	31.3	21.4	30.0
	6-10	6.3	22.7	12.5	14.3	35.0
	10-20	12.5	13.6	0	14.3	15.0
	20-50	6.3	13.6	39.5	7.1	10.0
	50	6.3	18.2	6.3	21.4	10.0

TABLE 11 Cont'd...

		PROGRAM				
		Bidwill	Whalan	Mt Druitt	Madang	Dawson
9. How many times have you been involved in some acitivity in the classroom?	0	81.3	90.9	56.3	85.7	75.0
	1	12.5	4.5	18.8	0	20.0
	2	0	0	25.0	0	5.0
	3-5	0	0	0	7.1	0
	6-10	0	4.5	0	7.1	0
	10	6.3	0	0	0	0
(a) Last year	0	56.3	22.7	18.8	42.9	30.0
	1-5	6.3	31.8	18.8	14.3	20.0
	6-10	18.8	9.1	12.5	0	10.0
	10-20	12.5	13.6	12.5	7.1	15.0
	20-50	0	18.2	37.5	28.6	20.0
	10	6.3	4.5	0	7.1	5.0
10. Have you got to know other parents through the school?	not many	43.8	36.4	6.3	28.6	350.
	some	31.3	40.9	56.3	35.7	30.0
	a lot	25.0	22.7	37.5	35.7	35.0
11. Have you become involved in any groups at/through the school?	not many	93.8	95.5	81.3	85.7	90.0
	some	0	4.5	18.3	7.1	10.0
	a lot	6.3	0	0	7.1	0
C. PARENTS' PERCEPTIONS OF PROGRAMS						
1. Are you happy about how your child is getting on at school?	not happy	6.3	0	0	35.7	10.0
	happy	37.5	9.1	25.0	21.4	35.0
	very happy	56.3	90.9	75.0	42.9	55.0
2. Is your child happy about school?	not happy	0	4.5	6.3	0	0
	happy	25.0	9.1	31.3	42.9	50.0
	very happy	75.0	86.4	62.5	57.1	50.0

TABLE 11 Cont'd...

		PROGRAM				
		Bidwill	Whalan	Mt Druitt	Madang	Dawson
3. Are you satisfied with how your child is progressing in these areas?						
(a) reading	dissatisfied	6.3	4.5	6.3	42.9	10.0
	satisfied	43.8	31.8	31.3	42.9	45.0
	very satisfied	50.0	63.6	56.3	0	40.0
(b) number	dissatisfied	6.3	4.5	6.3	0	15.0
	satisfied	56.3	27.3	43.8	78.6	40.0
	very satisfied	37.3	68.2	50.0	21.4	40.0
(c) writing	dissatisfied	18.8	9.1	12.5	42.9	15.0
	satisfied	56.3	36.4	43.8	42.9	65.0
	very satisfied	25.0	54.5	43.8	14.3	15.0
(d) creative skills/art,craft	dissatisfied	0	0	0	0	0
	satisfied	31.3	31.8	50.0	57.1	65.0
	very satisfied	68.8	68.2	50.0	42.9	35.0
(e) physical skills/ coordination	dissatisfied	12.5	0	0	7.1	5.0
	satisfied	50.0	40.9	37.5	64.3	45.0
	very satisfied	37.5	59.1	62.5	28.6	50.0
(f) knowledge about the world/ social studies/science	dissatisfied	12.5	4.5	0	14.3	10.0
	satisfied	50.0	68.2	62.5	57.1	65.0
	very satisfied	37.5	27.3	37.5	28.6	25.0
(g) concentration/ perseverence	dissatisfied	12.5	13.6	43.8	14.3	35.0
	satisfied	75.0	40.9	18.8	50.0	45.0
	very satisfied	12.5	90.9	37.5	35.7	20.0
(h) cooperation with adults	dissatisfied	12.5	9.1	6.3	21.4	5.0
	satisfied	62.5	40.9	62.5	42.9	60.0
	very satisfied	25.0	50.0	31.3	35.7	35.0
(i) cooperation with other children	dissatisfied	12.5	4.5	12.5	21.4	0
	satisfied	62.5	54.5	56.3	35.7	50.0
	very satisfied	25.0	40.9	31.3	42.9	20.0

TABLE 11 Cont'd...

			PROGRAM				
			Bidwill	Whalan	Mt Druitt	Madang	Dawson
4.	Do you have any other particular concern about children's learnings or behaviours?	no	68.8	81.8	75.0	57.1	55.0
		yes	31.3	18.2	25.0	42.9	45.0
5.	For your child Are you satisfied with:						
	(a) the amount of direction/ guidance	about right	0	0	0	21.4	5.0
		not enough	100.0	100.0	100.0	98.6	95.0
		too much	0	0	0	0	0
	(b) openness/flexibility	about right	6.3	4.5	0	7.1	5.0
		not enough	93.0	95.5	81.3	57.1	75.0
		too much	0	0	18.8	35.7	20.0
	(c) discipline	about right	6.3	13.6	12.5	21.4	15.0
		not enough	93.8	86.4	87.5	78.6	80.0
		too much	0	0	0	0	5.0
	(d) care/understanding	about right	12.5	0	0	7.1	0
		not enough	87.5	100.0	100.0	92.9	100.0
		too much	0	0	0	0	0
D.	PARENTS AS TEACHERS						
1.	Do you teach these things at home?						
	(a) reading	not enough	37.5	22.7	18.8	35.7	20.0
		some	56.3	50.0	37.5	57.1	55.0
		a lot	6.3	27.3	37.5	7.1	25.0
	(b) number	not enough	31.3	40.9	62.5	14.3	20.0
		some	56.3	45.5	18.8	71.4	75.0
		a lot	12.5	13.6	18.8	14.3	5.0
	(c) writing	not enough	31.3	31.8	18.8	14.3	35.0
		some	43.8	63.6	50.0	64.3	40.0
		a lot	25.0	4.5	31.3	21.4	25.0
	(d) creative skills/art, etc.	not enough	68.8	54.5	50.0	42.9	45.0
		some	25.0	36.4	37.5	42.9	35.0
		a lot	6.3	9.1	12.5	14.3	20.0

TABLE 11 Cont'd ...

		PROGRAM				
		Bidwill	Whalan	Mt Druitt	Madang	Dawson
D. continued....						
(e) physical skills/ coordination	not enough	50.0	36.4	50.0	28.6	20.0
	some	18.8	40.9	25.0	28.6	30.0
	a lot	31.3	22.9	25.0	42.9	50.0
(f) knowledge about the world/social studies/science	not enough	50.0	22.7	18.8	14.3	25.0
	some	31.3	59.1	43.8	42.9	30.0
	a lot	18.8	18.2	37.5	42.9	45.0
(g) concentration/perseverence	not enough	31.3	45.5	18.8	21.4	40.0
	some	62.5	45.5	62.5	50.0	45.0
	a lot	6.3	9.1	18.8	28.6	15.0
(h) cooperation with adults	not enough	25.0	22.9	25.0	14.3	10.0
	some	31.3	45.5	37.5	42.9	60.0
	a lot	6.3	31.8	37.5	42.9	30.0
(i) cooperation with other children	not enough	12.5	31.8	18.8	35.7	35.0
	some	43.8	50.0	43.8	28.6	30.0
	a lot	43.8	18.2	37.5	35.7	35.0
2. To teach your child do you use:						
(a) firm discipline	not enough	31.3	36.4	25.0	28.6	25.0
	some	31.3	45.5	37.5	21.4	40.0
	a lot	31.5	18.2	37.5	50.0	35.0
(b) reasoning, discussion	not enough	12.5	0	12.5	7.1	5.0
	some	25.0	40.9	31.3	50.0	45.0
	a lot	62.5	59.1	56.3	42.9	50.0
3. Does your child ask you to teach them?	not enough	43.8	4.5	25.0	21.4	25.0
	some	25.0	50.0	25.0	35.7	30.0
	a lot	31.3	45.5	43.8	42.9	45.0

6. NUTRITION SURVEY

During the initial medical assessment of the children when they were in their preschool year in 1977, some concern was expressed that the food habits of some of these children appeared poor, and that this could possibly represent a health problem. It was therefore arranged that the Nutrition Section of the School of Public Health and Tropical Medicine University of Sydney, collaborate with project personnel and the Health Commission, Western Metropolitan Health Region (Mt Druitt Polyclinic) in a nutritional assessment of some of these children. 86 of the 120 who were medically assessed in 1977, were traced and participated in this survey. The age distribution by sex is shown in Table 12.

Age at commencement of Survey - 12.8.78	Sex	
	Male	Female
5	45	38
	1	2

TABLE 12 : Age Distribution by Sex

Information on the food intake of each child, during the previous 24 hours and for the following two days, was collected. The interviewers were 20 postgraduate trainees in Nutrition and Dietetics and the 24 hour recall technique was used to obtain a description of the previous day's food intake. All but 3 of the mothers agreed to participate in a follow-up written record, using household measures, of the child's intake, over the next two days.

Food intake was coded on a standard form, and nutrient intakes calculated using a computer program developed from a) Tables of Composition of Australian Foods and b) manufacturers' information. (Thomas and Corden, 1970).

As 'feedback' to the parents, the individual results were tabulated for each child, together with the "Recommended Daily Allowance" for a child of similar age. The percentage above or below the R.D.A. for each nutrient was calculated. This was sent to each parent with a covering letter explaining that individual variations occur in dietary requirements and pointing out that the R.D.A.'s are estimates only of the amount of nutrients necessary for good health. The average intakes of various nutrients and the proportion of the group with intakes below the R.D.A.'s are shown in Table 13 .

Nutrient (units)	Average Nutrient Intake	% of children with intakes below those recommended by NH & MRC Aust. 1970
Energy (MJ)	7.73	22 (19 subjects)
Protein (g)	59.3	5 (4) *
Calcium (mg)	739	15 (13)
Iron (mg)	10.6	6 (5)
Retinol activity (µg)	736	6 (5)
Thiamine (mg/4.186 MJ)	0.67	8 (7)
Riboflavine (mg/4.186 MJ)	1.19	3 (2)
Niacin equivalents (mg/4.186 MJ)	13	0 (0_
Ascorbic acid (mg)	103.8	16 (14)

*probably none were below the FAO/WHO allowance of 1.39 g/kg (information of anthropometry incomplete)

TABLE 13 : Average Nutrient Intake

Five children had intakes below the Australian recommended levels for 3 nutrients (of either calcium, iron, retinol activity, thiamine, riboflavine or ascorbic acid). Four of these children had 3 intakes below the FAO/WHO recommended levels (the fifth had one nutrient, ascorbic acid, at the minimum allowance).

An intake below the level recommended, does not imply deficiency. The further below the recommended level, however, the greater is the probability that an individual's intake is less than the requirement.

These results suggest that although most of the children appear to have adequate intakes, some individuals may not have. Because of a lack of available Australian information it is not possible to know if these findings compare favourably or unfavourably with other sections of the Australian community. Although the original sample was random, the children taking part in the dietary study were volunteers by virtue of the fact that the mothers had agreed to take part. It has been found that those who do not take part are often those who may be at most risk (Marr, 1971). The methodology was adopted with a view to obtaining a reasonable degree of accuracy and co-operation and in fact the figure of 71% taking part is considered good.

While in this study adequacy of diet was mainly being checked it is possible that the problem lies in the other direction i.e. that the diet is over - adequate especially in energy. As discussed in the results only 22% were below the average requirement compared with the 50% one would expect. This idea receives some support from the fact that anthropometry found something like 10-15% of the children to be over-weight (Braithwaite, personal communication). This point would be worth following up as would an analysis of the type of food eaten (e.g. take-aways) and the proportion of energy they contribute to the diet. An attempt was made to do this and the results are still being analysed. They provisionally suggest that a relatively high proportion of the energy may come from highly refined, sweet foods.

Nevertheless, some concern is perhaps justifiable in an affluent society that over a third (38%) have a dietary deficiency of at least one nutrient. The limitations in interpreting these results has already been mentioned. Taken however, with the possibility of an over-generous diet for many, it would seem worthwhile that the nutritional status of these children be further investigated.

PART D

FUTURE DEVELOPMENTS

Extensive preparation for program implementation in the First Grade in 1979 has been taking place throughout the latter half of 1978. In some instances it has been possible to have the 1978 Kindergarten teachers continue with the same group of children into First Grade, thereby removing the need to familiarise new teachers with the underlying principles of programs. Some teachers, however, chose not to continue with the Project, and others were constrained by school organisational requirements from doing so. It was therefore necessary to select new teachers to replace them. As had been the case in developing the kindergarten programs, some compromises were necessary to accommodate both school and project curriculum requirements.

Some sections of the new buildings for Bidwill Public School, including the preschool section, will be ready for occupation in 1979. It is anticipated that three different forms of preschooing will be available viz Sessional and Home-Base and a combined Home-Base Sessional Program. The school administrators have suggested that it would be extremely desirable to evaluate each of these forms and Project personnel have been invited to assist in this task.

In response to the many requests received, another Inservice Course on Community Involvement in Schools, for parents and teachers, will be held during the year. As this will be the final year of the Project, even greater efforts must be made to ensure the establishment of a high degree of parent/teacher collaboration which will continue in the absence of direct Project involvement.

Evaluation activities will once again include a large scale testing session of all children (probably in September) and the less extensive but more frequent process monitoring and less formal testing throughout the year.

It is anticipated that 1979 will see the culmination of all endeavours of the past four years and a consolidation of the more successful aspects of programs into guiding principles which will continue to influence schools in the years to come.

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FIFTH ANNUAL REPORT
TO
BERNARD VAN LEER FOUNDATION

February, 1980

200

Project Steering Committee

Professor H. Philp	Macquarie University, Chairman
Mrs A. Bevan	N.S.W. Department of Education
Mr R. Turner	The Smith Family
Dr J. Harley	N.S.W. Health Commission

Project Staff

Project Director:	Professor Hugh Philp
Field Director:	John Braithwaite
Program Assistants:	Jim Alexander Jillian Belme Anne Gray Muriel Healey John Metham
Research Assistants:	Anne Clark Rosemary Birch Trisha Jupp
Secretary:	Helen Moore Marilyn Fraser

Project Schools

School	Principal	Infants' Mistress
Bidwill	Mr M. Hardes	Mrs L. Thomas
Dawson	Mr I. Feneley	Mrs M. Long
Madang Avenue	Mr J. Eddington	Miss D. White
Mt Druitt	Mr H. Jones	Mrs M. Jagoe
Whalan	Mr D. McCauley	Mrs J. Watson

List of Teachers - Year 1

Dawson	Maria Howe Margaret Collins
Madang Avenue	Sally Beckett
Mt Druitt	Janet Yastreb
Whalan	Anna Breust Lois Fragar
Bidvill	Kate Dennis (1st half) Michael Taylor (2nd half) Fiona Roden Berenice Collerson Lynda Beer (Language Resource Teacher)

ACKNOWLEDGEMENTS

Throughout the five years of activities in the Mt Druitt area, the list of people who have directly and indirectly contributed to the Project has grown immensely. In fact, without the wholehearted co-operation of individual school principals, infant mistresses, teachers and parents, as well as community representatives, our endeavours could not have succeeded.

At the institutional level we must again thank the officers of the N.S.W. Department of Education, the Health Commission of N.S.W., and in particular, the staff of the Mt Druitt Polyclinic.

The Project benefitted from the guidance of the members of the Standing and Field Committees, who have over the years helped to smooth the way ahead.

At the end of our five years' field work we would like to record our appreciation to the Bernard van Leer Foundation for their personal and material support. Their continued support over 1980 will enable the results of the Project's activities since 1975 to be satisfactorily finalised.

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PREFACE

The fifth Report to the Bernard van Leer Foundation marks the culmination of the Mt Druitt Early Childhood Project's activities in the schools and surrounding communities. * It would have been difficult to foresee the successful completion of the Project when begun in 1975. The scope and thrusts of the Project broadened considerably over the years and the impacts, especially indirect ones, were greater than originally anticipated.

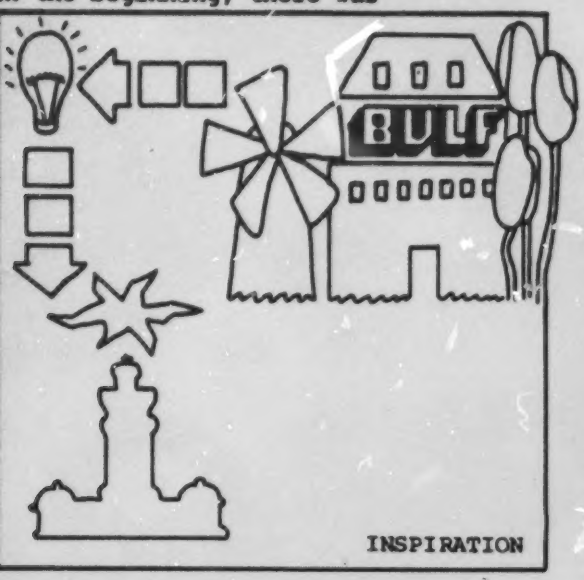
The volume of objective and subjective data is great and is currently being condensed into one volume presenting the overall results of the Project's activities. Another volume, also in preparation, will discuss general problems to which solutions were sought and sometimes found in the course of the work.

Because of the detailed educational, medical and social information collected on a large sample of children in the Mt Druitt area, it is hoped that the subsequent school performances of these children will be followed at nodal points in their development. The information needed for a significant longitudinal investigation exists within the data and the initiation of such a study could fill an important gap in educational research in Australia.

* Readers who are interested in these publications should either contact the Project director or consult the appropriate references in the ERIC system.

THE OFFICIAL ACCOUNT OF THE MT DRUITT PROJECT

In the beginning, there was



INSPIRATION

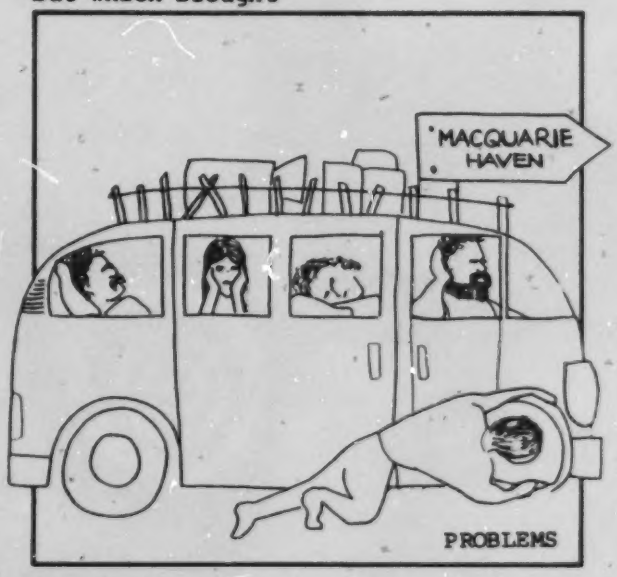
which flowered into

. RESEARCH PROJECT

begun with

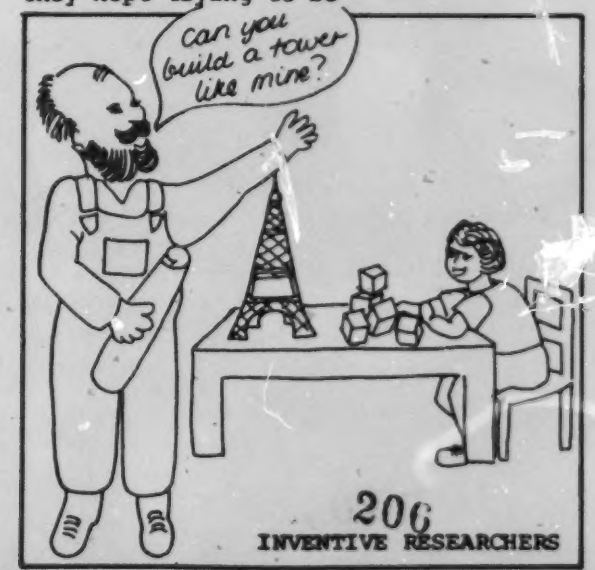
VIGOUR AND OPTIMISM

but which brought



PROBLEMS

They kept trying to be

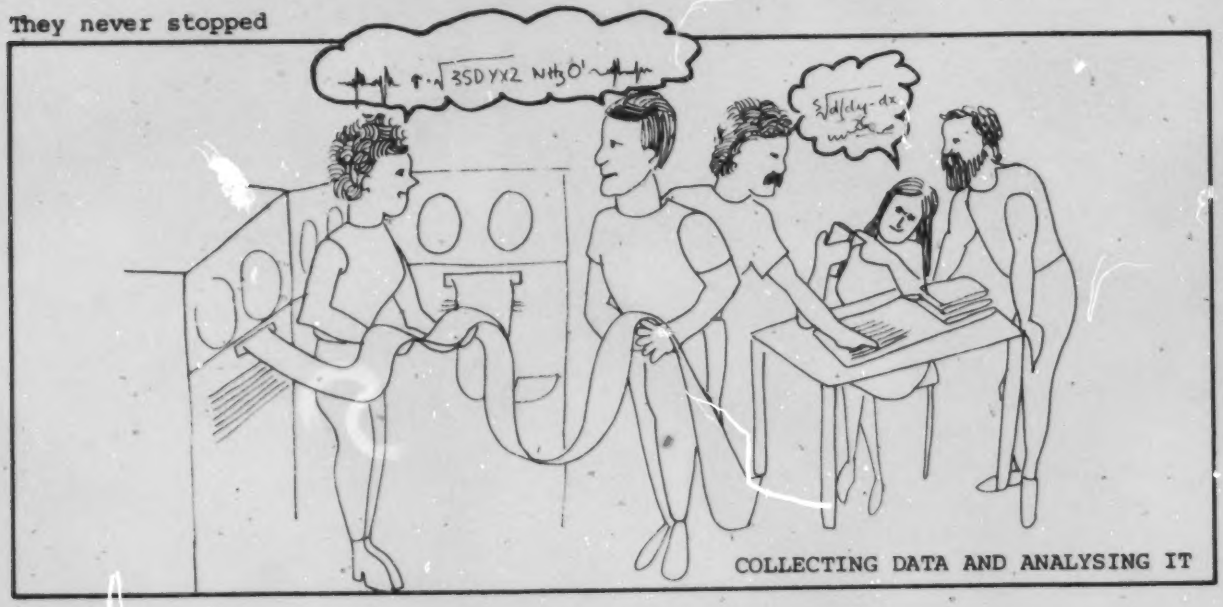


INVENTIVE RESEARCHERS

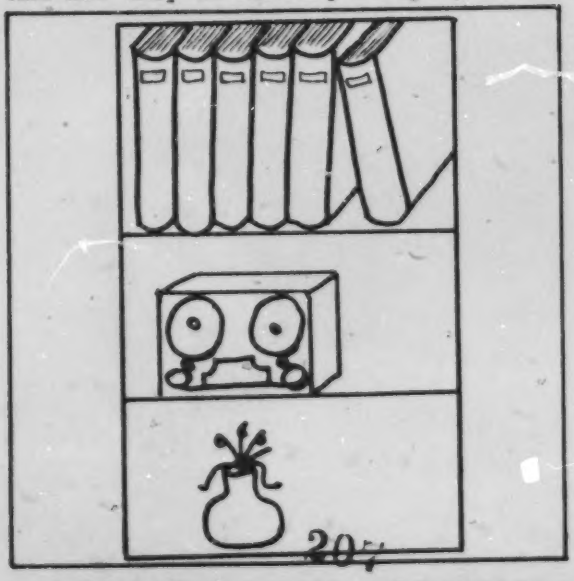
They never disturbed

They always promoted

They never stopped



And now they're writing it up



FOR ALL TO READ
HAPPY READING!

PART A

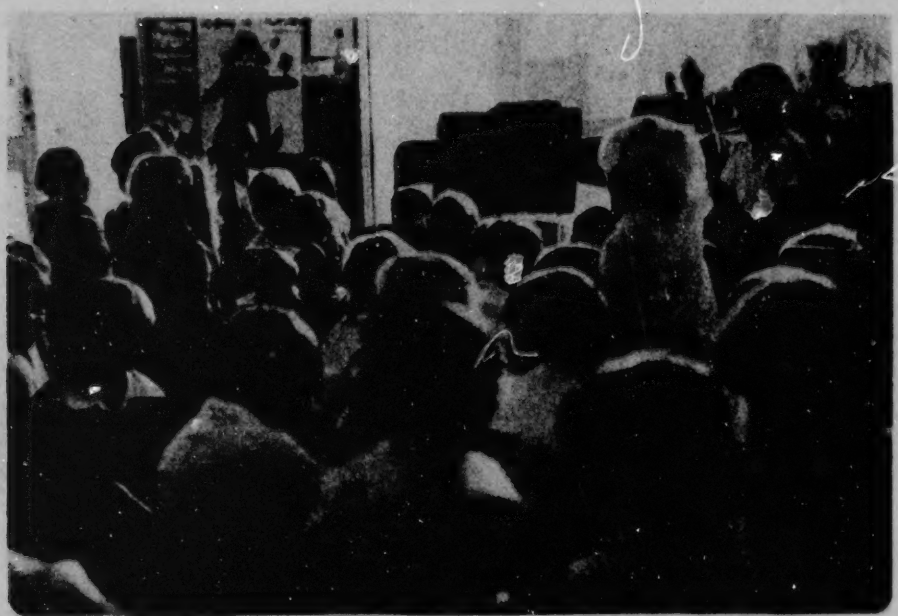
GENERAL ACTIVITIES OF THE PROJECT IN 1979

INTRODUCTION

In 1979, the major activities initiated and developed by the Project over the previous four years were continued. Because 1979 was the final year of direct Project involvement in the schools, few new initiatives were mounted. However, some enterprises from earlier years were still ongoing in many schools, and Project staff remained involved with these as well as fulfilling their main program and research obligations.

The extra year of work in the Infants' school setting was welcomed because it provided an excellent opportunity to elaborate and refine program goals and implementation strategies. Many problems had been settled through negotiation and experimentation during the Kindergarten year, which allowed a fuller development of program goals as they related to the school setting. The experience of developing long-term programs, which saw their final phase in 1979, was a valuable one for school staff and Project personnel. Certainly, it gave school staff more time to observe program practices and discuss results which made for a better basis for making curriculum decisions in the future.

Everyone associated with the Project is aware that Project involvement has directly influenced the school experiences of a group of children at the earliest, most formative age of their school careers. The extent to which these experiences are maintained for this group of children is now a matter for local school policy to decide. It is sincerely hoped that the challenge and the experiences provided by involvement with Project activities can be used to benefit not only this particular group of children, but all young children.



Classroom activities are not always serious

PROJECT MANAGEMENT AND PERSONNEL

The Project activities were coordinated at local level by the Field Committee which met regularly, but less frequently, than in previous years. Changes in Departmental staffing arrangements meant that Mr Bernie Delaney was welcomed to chair the meetings of the Field Committee in the place of Mr Hal Boyd. It was with regret that members of the Committee farewelled Mr Boyd, who had ably guided Field Committee Meetings and personally supported many of the Project initiatives in the Mt Druitt area.

The role of the Field Committee in 1979 changed because the Project was in its final year of implementation. While it was still a forum for dissemination of information and for dealing with day-to-day problems that the Project inevitably brought with it, the long association of many of its members meant that it played a supportive role in some of the difficulties encountered in 1979. Cooperation was immediately forthcoming when, for example, data collection went beyond the date considered convenient by the schools.

The Year One teachers adapted admirably to the task of implementing programs in the classroom. Except in the case of the Cognitive Program, different teachers volunteered to be involved with designing and implementing programs. The Cognitive Program was organised in 1979 in a flexible teaching space with two of the three teachers who had been involved with the program in Kindergarten responsible for program implementation. All the teachers involved in program activities in Year One classrooms therefore became closely acquainted with the aims and objectives of the Project and the complexities of implementing them at a late stage in the Project's activities. Although teachers' meetings were held during 1979, they were less frequent than in previous years and most teacher training was done 'on the spot' by the Program Assistant attached to the school. These teachers remained very committed to their task, even though there was little opportunity to share problems and experience the Project in any broad overall sense. They deserve our appreciation.

Two meetings for teachers were held during 1979 to exchange ideas, identify and solve common problems and discuss important issues, particularly parent involvement. All teachers in Project programs had undertaken to involve parents in the schooling process. This took a variety of forms, which will be discussed at later stages in this report.

The commitment that school staff showed to the Project was highlighted during the year when, for various reasons, Project staff was temporarily left short-handed. In one case, an extended illness of one Program Assistant meant that program duties at the school were spread amongst the rest of the Program Assistants. This trying time was handled competently by teachers and administrators at the school, who proved flexible enough to relate to different people with different styles. Another difficult situation arose when another Program Assistant left the team before the end of the year. However, meetings between the Program Assistant and school staff took place regularly until the end of the year and in this way program difficulties were dealt with. It should be added that time given to these meetings was 'out of hours' for all concerned. In short, teachers and school administrators deserve praise for the skill and energy shown in maintaining programs - a factor crucial to the validity of our research.

PROJECT DEVELOPMENTS

The two major activities for the Project in 1979 were the implementation of the five programs at the five schools, and the collection of data to verify program implementation, and to assess the achievement of children attending the programs. The main guidelines for both these activities had been laid down in 1978. At this time the major changes were thought through in relation to applying the five different approaches to the school setting. In addition, decisions were made in structuring research programs and selecting samples. The events and changes made in the five programs are documented in subsequent sections of this report. In November 1979, data were collected on the main groups in the sample so that at the end of 1979 it was possible to compare preschoolers and non-preschoolers in both experimental and non-experimental classes (see Figure 1).

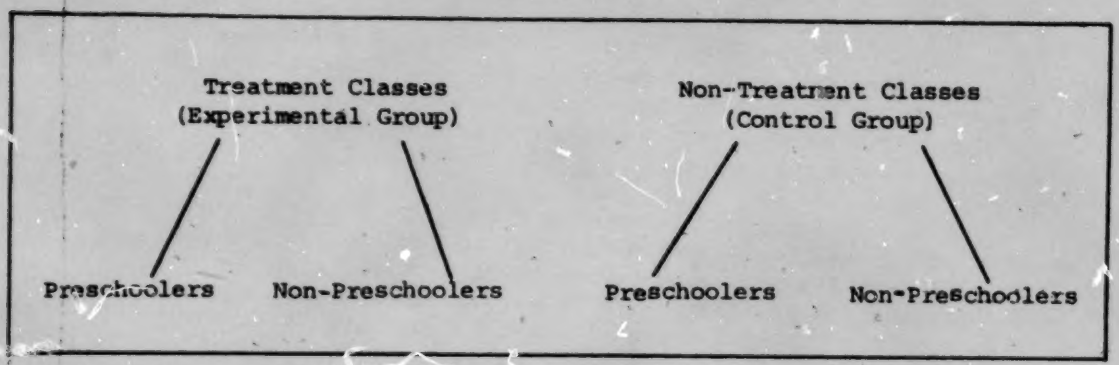


FIGURE 1: Major comparison group, 1979

Evaluation activities were less extensive than in 1978. No data were collected at the beginning of the year because new baseline data had been established on the comparison groups at the beginning of the Kindergarten year. The effects of the programs were assessed by a comprehensive testing session in September. Three hundred and fifty four children spread across ten different sites were tested by a team of fifteen research assistants. The measures used covered the major areas of the schools' curricula.

The test battery consisted of the Neale Analysis of Reading Ability Form A, the Circus Social Knowledge Level D, Peabody Picture Vocabulary Test, Language Structures, Numeracy and Spelling; the last three tests having been designed by Project staff specifically for use in the Mt Druitt Project. A smaller sample of children was evaluated on mathematical conceptualisation and dimensional language ability.

Classroom processes were monitored at various times during the year using PROSE. In addition, two other instruments were used. One was an observation instrument based on similar instruments which had been previously developed - YOYO (Yearly Observation of Year One children). The second was the TLI (Teacher Language Instrument) which allowed a comparative analysis of teachers' language styles to be carried out. A series of in-depth interviews with parents was conducted by two specially trained researchers to obtain information about their children's preschool education, their present schooling and hopes for their future employment.

Steps were taken to ensure reliability of the data as far as possible by:

i) careful selection of testers;
ii) thorough training including practice sessions; and
iii) rotation of testers between sites when more than one tester was collecting the same data.

The analyses of data collected during 1979 are at the time of writing, incomplete.

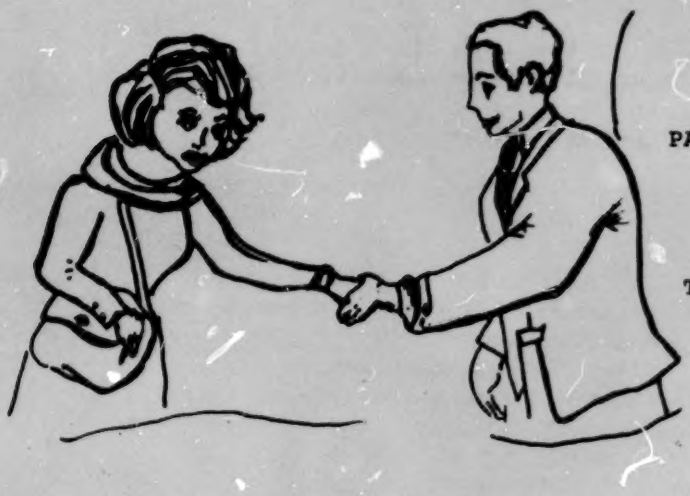
It was pleasing to be approached by the Principal of one of the schools to help develop and evaluate the effects of three different preschool programs being offered at that school. One of the Program Assistants took on the responsibility for designing and carrying out this piece of research. This initiative highlights that a positive relationship has been built up between Project staff and school administrators.

Finally, we would like to thank the Principals, Infants' Mistresses, teachers and parents who cooperated with and supported all the activities carried out throughout 1979. We consider that a great deal of work was achieved in the final year of the Project. Such a workload could not have been accomplished unless the commitment and motivation of all concerned with the Project had not been present right to the finish of activities.

DEMONSTRATION AND DISSEMINATION ACTIVITIES

There was a different focus to dissemination activities during 1979. Fewer visitors came to view Project activities in the field than in previous years, but interest in results that the evaluation research had shown was keen in some quarters. Members of the Project staff actively sought opportunities to speak to both academic and community groups. Trends shown by the evaluation measures were discussed with Macquarie University staff members whose comments sharpened our presentation procedures and made suggestions for future presentations. Papers were given at the Australian Preschool Association Conference (April, 1979) and the Australian Association for Research in Education (November, 1979) directly related to findings of the Project over the previous three years. Invitations were also accepted to speak to groups of community people, playgroups and seminars organised by local councils, etc.

Perhaps the most important public function was an evening arranged by Mt Druitt schools held at the end of July at Rooty Hill RSL Club. The topic set down was "Parents in the School". Personnel from all schools in the Mt Druitt area attended, as did many community people. This was an important event because it provided an opportunity to exchange ideas and to make plans to involve parents more directly in school processes. In addition a network was established among the schools in the area and provision made for teachers and parents to visit each school. This was an excellent outcome which engendered a lot of goodwill.



LET'S GET TOGETHER

PARENT/TEACHER CONFERENCE

ROOTY HILL R.S.L.

TUESDAY, 31st JULY 1979

4.00 p.m. - 9.00 p.m.

The course is designed to cover aspects of parental and community involvement in schools including:

* advantages and possibilities of involving the community in schools;
* practical examples of activities currently being undertaken in Mt Druitt/Shalvey schools;
* planning for continued and future development of school/community interaction.

FIGURE 2: Excerpt from Programme of Parent/Teacher Conference

In retrospect, while the program and evaluation activities were obviously very important, it was parent involvement which emerged as a major issue for the Project. The level of public discussion concerning parental involvement in schools was not foreseen at the beginning of the Project. Since it is a crucial issue it is very heartening to see parent involvement receive prolonged discussion and such united treatment from schools and parents in the Mt Druitt area.

It was also pleasing to have Mr Oscar van Leer visit during the year and speak positively about the achievements of the Project over the previous four years. The Project could not have been successful without the high level of school commitment and cooperation that was evident, especially in the later stages of the Project. We are pleased that contact will continue with schools and people in Mt Druitt as we enter the next phase of the dissemination process, the writing and distributing of results.

PART B

PROGRAM DEVELOPMENTS

IN 1979

1. THE CONTEMPORARY PROGRAM IN YEAR ONE AT MT DRUITT PUBLIC SCHOOL 1979

The Contemporary Program implemented in 1979 in the Year One classroom followed the same principles that had guided development in the Kindergarten year. However, because this was the second year of implementation in the mainstream school setting, two important developments occurred over the year.

Firstly, there was a deeper understanding of the principles on which the program is built and a consequent willingness to wait for the achievement of long term goals. There was also an acceptance of the concept of broad goals in curriculum development and no set curriculum materials were prescribed for children in the Contemporary Program. This was an important point, for it allowed different programs to be designed for individual children.

Secondly, we became more skilled at matching appropriate classroom practices to program goals. A wide range of activities was arranged in a free, flexible regime which placed responsibility on the children for managing their own learning experiences. Giving the children responsibility within freedom was the single most important program tactic for encouraging independence, task persistence and intrinsic motivation. This was seen as being the essential process by which the children could develop a positive self-concept which is a most important step in developing an adequate, competent learner.

Curriculum Planning

The challenge for curriculum planning for 1979 was to adapt learning experiences to suit individuals within the program. This process required that all experiences planned for the children were critically examined to assess their outcome and impact on each child.

An informal assessment of all children in the class was carried out early in the year. This was done by presenting similar learning experiences in reading, language, maths and writing to the whole group. It should be emphasised that although classroom experiences could be described by traditional subject headings, routines were not necessarily arranged around them. The children were free to select activities which covered these areas, and in group time the teacher would select activities from these areas for presentation to the group.

The assessment revealed that there was a decisive split in the class group. Some children were coping extremely well with the experiences presented to them, while others were not coping at all. In the teacher's words "the brighter children were doing phonic digraphs, while others were not coping with single sounds". Different children clearly needed different experiences.

This had clear implications for curriculum planning. To preserve the child-centred nature of the program the teacher planned from child study material and anecdotal 'on-the-spot' notes taken during the day in class. Content for learning experiences would be built on the interests shown by the children and the initiatives taken by them in class. At the end of each day, the teacher filled in relevant comments on the studies of the children observed that day, and would refer to anecdotal jottings to plan emphases for the following day.

The child studies, the major planning device for the program, developed in well-defined stages. Early in the year the children were informally interviewed to determine current interests. This knowledge was used to suggest relevant and engaging activities for individual children. This was especially important in determining content for language-experience reading, making suggestions for story writing and setting a theme in conversation. In addition, some interesting facts concerning home background and parental attitudes were discovered. For example, the quantity of television watched and the quality of programs selected was useful information that could often point to parental attitudes and explain classroom behaviour.

The second step in compiling the child studies was to log each child's activities and interactions for an entire day. This focussed attention on individual children in a social, work-oriented context, and observation illuminated the social interaction problems some children were having. 'Individual plans' consisting of strategies to assist some children develop social and personal skills were devised. These 'individual plans' were a crucial planning device, for the Contemporary Program is built on the premise that satisfactory development in social and personal skills is essential before meaningful cognitive learning can take place.

The next stage of the child study process required that special events were recorded daily as they happened. These 'jottings' were used as the basis to formulate daily programs for individual children. Comments on children were written regularly and reports were written in descriptive, rather than judgmental, terms.

Classroom Procedures

Classroom events and procedures were closely tied to programming. Routines, where established, were tied to group needs. For example, at the beginning of the year a weekly writing transcription lesson was given to the whole group, to facilitate the acquisition of writing skills. This procedure was used to give the children certain skills by which they could become independent in learning tasks. Once this aim was achieved, the routine was discontinued.

On a 'typical' day, children were often in the classroom before school officially began, carrying out self-selected activities. When lessons formally began, all children congregated in the 'home area' - a cleared space in the centre of the classroom. A variety of activities was begun here, at the suggestion of the children. It could be a

show/tell time, or a listening time - whatever the children decided would be interesting to do that day. At this time, there was a discussion of what the day's tasks would be and what planning needed to be done to carry them out. For example, the materials that would be needed and where they could be found were discussed.

The tasks were set out on task cards which were displayed prominently in the classroom so that children could consult them at any time of the day. Examples of task cards are shown in Figure 3.

Group 1
1. Draw a picture
2. Play with shapes
3. Read a book to the teacher

Group 2
1. Sounds card on teacher's table
2. Double Dice game
3. Write a story
4. Read a book to the teacher
5. Number stencil Box 4

Group 3
1. 1 writing card
2. Book and tape
3. Read a book
4. Number stencil box
5. Make a list of words with 'ing' at the end
6. 2 work cards
7. Play draughts with your group

FIGURE 3: Examples of task cards used in the Contemporary Program, 1979

There were different task cards for different groups of children. The tasks differed in number and complexity to cater for individual differences among the children. The children completed the task in their own time and were responsible for finishing the set tasks of their own accord. The children were free to choose work companions and the time at which they would do particular tasks. The only rule relating to task completion was that the tasks must be finished that day.

The groupings served only to define the tasks to be done. This meant that the tasks to be done were suited to the cognitive abilities and work skills of the children. As the year progressed the children's skills and knowledge developed and grew, and the tasks increased in number and complexity. For example, one group of children began with four tasks and by mid-year was comfortably completing eight tasks. On the other hand, another group of children began with one task and by mid-year was completing 3 or 4 tasks. Certainly though, all children showed growth in the number of tasks they could finish properly. The content of the daily tasks was determined by the needs of the small groups of children and noted by the teacher. The overall, or 'this-is-what-we-will-do-tomorrow' view, was avoided.

Informal learning group listens to a story

identification with a sympathetic person appeared to be necessary to develop responsibility in some children in the group. Parents visited the classroom on every day of the week, and remained for the morning session. Each parent had a very small group of 3 or 4 children to concentrate on. The composition of these groups changed from time to time, and sometimes a parent would work with one child if that child appeared to need individual attention. The children valued this more intimate relationship, looked forward to the time they had with a parent, and responded to the genuine interest shown in them by parents.

Two children in particular benefitted from contact with a parent. Child C became much more co-operative and improved in his attitude to work through consistent contact with an accepting but firm parent. Another, Child S, became much more constructive in her work habits after some sessions with the constant attention of a gently guiding parent. Both of these children looked forward to parent group time and their development was felt to be in large measure due to the relationship they had with an interested adult who gave them the specialised, sustained attention a teacher cannot afford in a busy day.

Parent involvement also provided an opportunity for parents to grow in skills and understanding. Traditionally, ancillary roles had been offered to parents by schools. These roles served a purpose, but did not provide opportunities for parents to become involved in the day-to-day life of the classroom, or actively to participate in the learning process with individual children. Such participation made involvement at school a more rewarding experience for parents as well as children.

Some parents who visited the classroom regularly were interviewed to gauge their reactions to both the program and their involvement in it. Most parents felt that their participation in learning activities was not only personally rewarding for them, but beneficial to all the children in the program. For example, parents commented that they enjoyed better out-of-school contacts with the children in the class, who approached them whenever they saw them locally. Some parents found out through observation how different children reacted to social as well as academic challenge and thought that this activity gave them useful information about children and their differences.

This style of parent involvement also promoted a closer relationship with the class teacher, who was now seen to be more approachable by parents. Parents learned a great deal about what was happening in the program by being on the spot and felt better able to help their children at home. They appreciated being given the opportunity to assist the children's learning directly and to follow their progressive achievements which they claimed gave real purpose to their involvement.

Parents were also asked to comment on their own child's learning and personal development in the Contemporary Program. Most parents interviewed felt that their children were making satisfactory progress in their social and cognitive development. Some parents indicated that in their opinion, the Contemporary Program gave too much time to play and that too few activities were structured, although they specifically restricted their comments to their own child. As an answer to this type of comment, further explication of the program objectives was

necessary, and further developmental information made available on the continuing value of play experience in the cognitive development of the seven-year-old child.

Parent Activities

A number of activities were arranged during the year to keep parents informed of program developments and to gain feedback concerning their satisfaction with program outcomes for their children. In April, a workshop was held, to initiate parents into the specific interventionist role planned for them. General program objectives were discussed, the class teacher described the daily 'routine' followed by the children, the range of materials available for activities and the 'small group' system where each parent would be responsible for assisting a small group of children to complete a day's program. The most valuable and consistent method of dissemination of information and canvassing of opinion was the casual conversation. Since most parents brought their children to school, contact was made with them regularly.

Program Evaluation

The central strategy in evaluation in the Contemporary Program was formative and diagnostic. The program planned experiences for the individual child, and assessment of each child's needs was the most important aspect of program evaluation. Evaluation activities in 1979 were for diagnostic purposes. The school carried out internal testing of the academic areas of achievement, i.e. reading, mathematics, handwriting, etc. and these were not duplicated.

The main objectives for children in the Contemporary Program concerned the development of behaviours and attitudes that revealed a positive self-concept. The philosophy of the program was based on the belief that a positive self-concept was essential if the young child was to become a self-motivated, effective learner.

The socio-emotional checklist, the Personal Behaviour Rating Scale was designed to assess the level of development each child showed in the areas of personal development, emotional stability, group participation and dependability. The checklist items were selected as a representative set of behaviours for each area. The items were constructed as bi-polars, and were scored on a four point scale.

The Personal Behaviour Rating Scale was administered twice during 1979. On both occasions, the checklists were completed by the teacher after intensive observation of each child. In addition, notes which were taken to form child studies were consulted. The scale was to be used as a diagnostic, as well as an evaluative, instrument.

June was selected for the first data collection. This allowed sufficient time for the children to settle in and for the program to be fully implemented. This data collection was treated diagnostically, and children rated at the lower bi-polar on any item or set of items had individual plans written for them intended to develop expertise in the areas in which their skills were lacking.

The data collected in both June and November were also analysed to map the performance of the group as a whole. The data were analysed so that the mean rank for each item was obtained. This data are out in Figure 4.

At the June assessment, a mean higher than the midpoint (2.0) was obtained for each item, indicating that the group as a whole was performing satisfactorily on the 24 behaviours comprising the Personal Behaviour Rating Scale (see Figure 4). In particular, the group participation skills of the class were well developed. The children were seen by the teacher as being co-operative (3.70), as being accepted by the group (3.47), as always willing to share (3.47) and take turns (3.31). Most children were also dependable in that they accepted responsibility for their actions (3.23), took their share of classroom chores (3.04) and completed jobs without supervision (3.04). The group shows evidence of consistency and maturity in these behaviours.

Behaviours relating to the emotional stability of the group also showed means well above the 2.0 centre of the scale. In particular the children were alert and interested in their approach to their work (3.12) and were flexible in adjusting to changes in classroom routine (3.31). Ability to organise the work day (2.89) and task persistence (2.85) rated above the mean showing success in coping with the program as implemented. It may be said that program implementation has at least maintained, if not promoted, the development of emotional stability in the children. Problem solving behaviour had a lower mean rank (2.62), indicating that, relatively speaking, this was a weakness in the group.

The 10 items comprising the Personal Development Scale showed greater variance in the mean ranks scored for these behaviours. The group were judged to be self-motivated (3.08), innovative (3.08) and creative in dramatic play (3.19). Some children were seen as being dependent on the teacher's help (2.69), as lacking confidence in their efforts (2.69) and as being unable to protect their own interests (2.62).

This type of analysis gave an excellent profile of the personal and social development that the group as a whole presented to an observer. However, the main use for the scale was a diagnostic one for the purpose of writing individual plans for the children needing support in the development of the personal skills.

At the November assessment, the group as a whole showed an improvement on every item (means ranged from 3.42 to 3.89). Two items stood out as having produced the greatest improvement in scores from June to December administrations (see Figure 4). Item 5, which related to confidence in handling learning tasks in the classroom, showed the greatest improvement. On item 16, mapping the ability of the group to persist in solving problems, the group also showed marked growth in skills.

A brief perusal of the figures shows these general trends. The June assessment was very influential in devising program practices to cope with the individual needs of certain children. The November assessment provided a summative statement of personal and social skills acquired by the class group during 1979. Further analysis of the

Item	Code 1	2	3	4	
A. PERSONAL DEVELOPMENT					
1) Timid			▽	▼	Self-confident
2) Constantly dependent			▼	▼	Self-reliant
3) Needs continual help			▽	▼	Seeks help only when necessary
4) Over-dependent on adult approval			▽	▼	Self-motivated
5) Lacks confidence in efforts			▽	▼	Generally satisfied with own work
6) Only uses a limited range of materials			▽	▼	Actively explores all materials in environment
7) Rarely initiates activities for self			▽	▼	Can initiate and carry through activities alone
8) Very rarely participates in creative activities			▽	▼	Highly creative and innovative
9) Never takes part in dramatic play			▽	▼	Highly creative in dramatic play
10) Unable to protect own interest: becomes bossy or aggressive			▽	▼	Able to protect own interests while respecting the rights of others
B. EMOTIONAL STABILITY/WORK HABITS					
11) Excitable			▽	▼	Stable
12) Restless			▽	▼	Alert and interested
13) Reacts strongly to change in routine			▽	▼	Adjusts readily to change in classroom routine
14) Unable to organise working day			▽	▼	Can follow an independent work plan
15) Rarely finishes task or moves rapidly from one task to another			▽	▼	Remains until task is completed
16) Rarely seeks to solve problem on own			▽	▼	Is persistent in solving problems
17) Unco-operative			▽	▼	Co-operative
18) Cannot mix with group			▽	▼	Generally accepted by group
19) Never shares			▽	▼	Always willing to share
20) Always tries to be first			▽	▼	Will take turns
C. DEPENDABILITY					
21) Blames others			▽	▼	Accepts responsibility for own actions
22) Continually tests limits			▽	▼	Understands reasons for rules and obeys them even when teacher is not present
23) Avoids jobs			▽	▼	Takes share of classroom chores
24) Leaves job uncompleted			▽	▼	Completes jobs without supervision

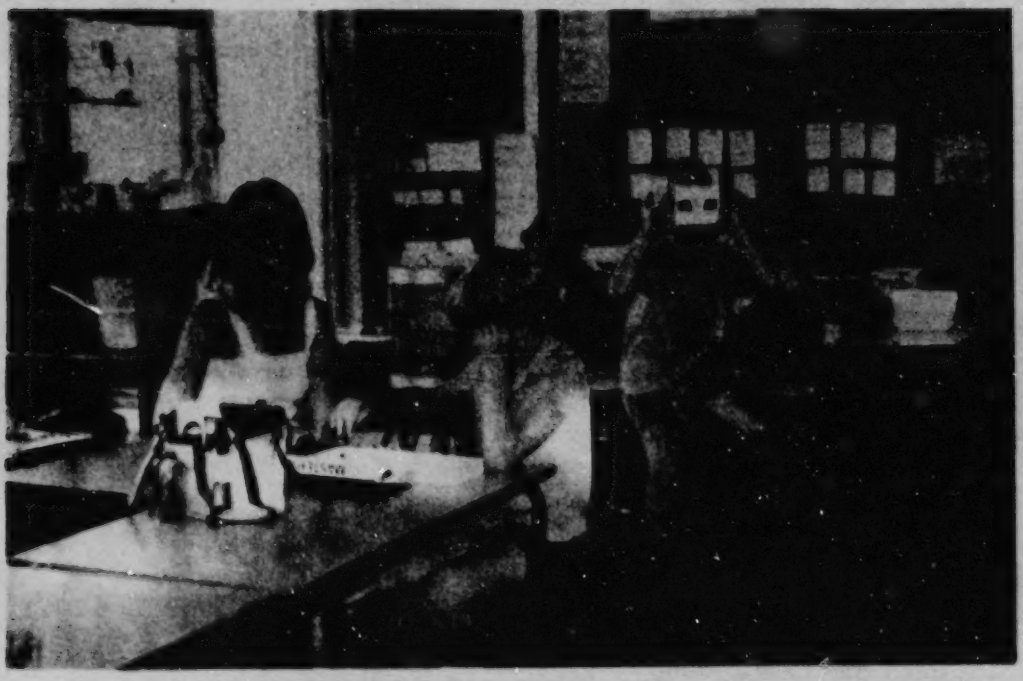
▽ June assessment ▼ November assessment

FIGURE 4: Mean Rankings on Personal Behaviour Rating Scale

figures will assist with describing fully the effects of program practices during 1979. These analyses will appear in a further report on the implementation and the effects of the Contemporary Program in 1978 and 1979.

CONCLUSION

There were several important outcomes from the frustrations and successes of implementing the Contemporary Program in Year One. We feel that we moved further towards integrating program objectives and infants school practices. Clearly, while parent involvement remained settled in the model set up in 1978, parents were given a greater degree of responsibility for direct participation in the learning process. Discussion with teachers and administrators at the school pointed towards the continuation of the Contemporary Program in Year Two. This is a most desirable outcome culminating three years of work.



Children select their own activities

2. THE BEHAVIOURIST PROGRAM IN YEAR ONE AT WHALAN PUBLIC SCHOOL 1979

A. Introduction to the Program

In 1979 the Behaviourist Program was followed through into Year One. In essence it retained all the elements integral to its implementation in preschool and Kindergarten and which have been detailed in previous yearly reports. The behavioural specification of educational objectives was again undertaken and the new teachers trained to implement the program along the intended lines. As was the case in previous years, teacher training occupied the initial period of the program's development for Year One. Unfortunately, the extended illness of the program assistant associated with the program in the early part of the year caused some difficulties. It was a tribute to the teachers concerned that the program successfully continued under such conditions.

B. Program Objectives

For Year One children the program had the following objectives:

i) The development of the reading skills of structural analysis, word attack, phonic analysis, comprehension, dictionary use and library use;

ii) The development of the number skills of numeration, number operation, number application, practical number and sets;

iii) The development of the writing skills of forming all lower case letters and recognition of upper case letters;

iv) An extension of the child's knowledge (literature) and skills (spelling);

v) An extension of the child's knowledge about the social and physical world with specific emphasis on health, safety and physical fitness;

vi) The stimulation of creativity by participation in art, craft and music;

vii) The development of prosocial skills which relate to interaction with peers and adults; and the development of those skills which relate to the use of materials.

C. Teachers' Roles Within the Program

For teachers the major objective of the Behaviourist Program was to develop their knowledge, skills and attitudes about the program and to acquire skilful use of social reinforcement techniques. For example, teachers were required to make frequent contact with children who were on-task by using social praise. Off-task behaviour was to be ignored and teachers were required to avoid any form of disapproval.

As well the teachers had to specify the final performances required to demonstrate the achievement of each child-centred objective. The child's current level of performance was determined by a pre-test. A favourable learning situation was created in which prompts were provided for appropriate behaviour but eliminated for inappropriate ones. Both group and individual instruction were used when appropriate for particular segments of work.

A further objective was to involve parents in the education of their children by providing opportunities for them to share in the schooling process. For the program this entailed such activities as disseminating information on the Behaviourist Program, offering opportunities for developing interactive skills with the children and the teachers, and influencing parental attitudes in a positive direction toward an acceptance of the program.

Cutting out activities

D. Routine

In general both Kindergarten and Year One tended to follow the same routine. Between 9.00 a.m. and 11.00 a.m. the teachers covered the weekly concepts drawn from the terminal goals. This coverage may have been in the way of introduction, review, drill, discovery or whatever educational practice was appropriate for that concept. The group size could fluctuate from whole-class, through small groups to individual instruction. Between 11.15 a.m and 12.30 p.m. different activity areas were set up. Some of these were compulsory while others were free choice. Such activities might include the listening-post, the shop, weighing, water-play, tutor or painting. The nature of these activities was suggested by the goals stipulated for the week. Teacher and parents monitored the compulsory activities, recording children's performance on the specific skill task. The period between 1.30 p.m. to 3.00 p.m. was dominated by activities drawn from the other subject areas such as Art, Craft, Physical Education or Health. In both Kindergarten and Year One there were two teachers working in a team-teaching situation. However, the luxury, or rather the necessity of the assistance of two full-time aides as had happened in the preschool was not provided. This meant that the adult/child ratio was one to thirty rather than the one to ten enjoyed in the preschool. This led to greater press being placed on parental involvement. If the program was to function optimally, its approximation to the preschool model appeared a necessary step which meant the reduction of the adult-child ratio. However, given this limitation, the teachers were still able to implement the program effectively.

E. Evaluation

For the purposes of this report the teachers were requested to evaluate the children in Number, Reading Comprehension, Writing and Spelling at the end of second term. Figure 5 indicates the terminal assessment of the children's mastery in these skill areas. It can be seen from Figure 5 that the class average for Number was 72%, for Reading 76%, for Writing 92% and Spelling 80%.

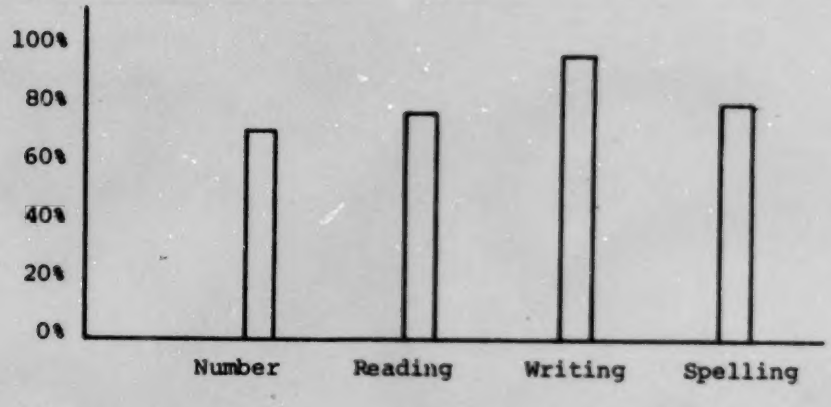
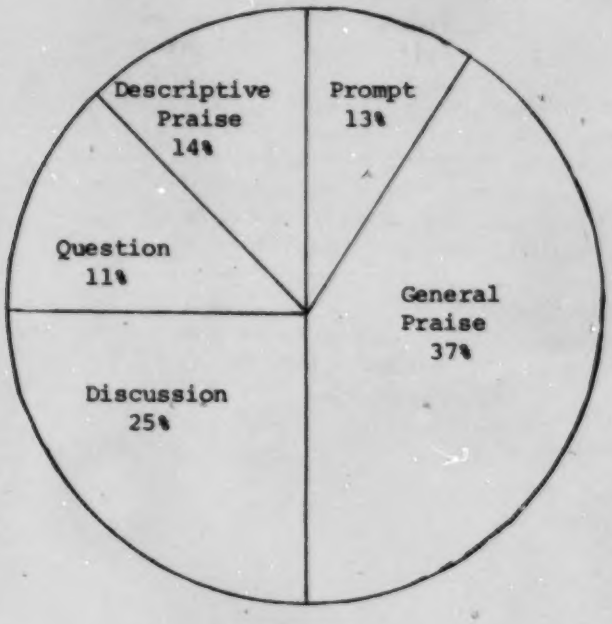
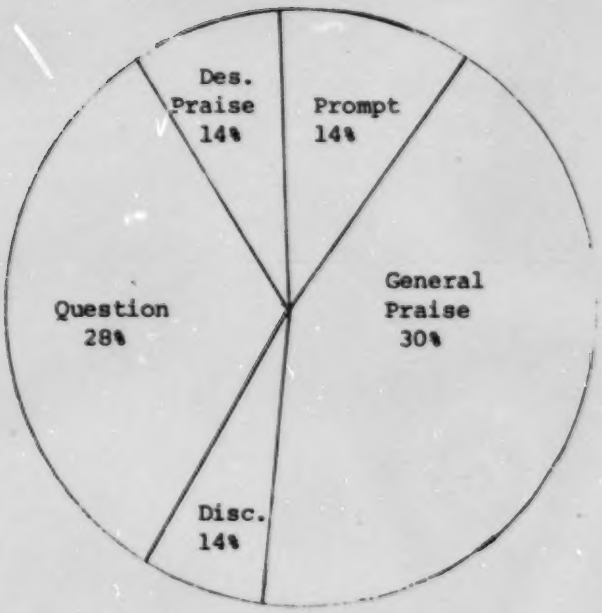


FIGURE 5: Results of Tests of Basic Skills, Year One, 1979

In Year One, the program did not experience the same turnover in staff as was experienced in Kindergarten. In evaluating these teachers, rather than aggregating the observation schedules over the year as was done in Kindergarten, a randomly scheduled sampling of the teachers' behaviours was conducted near the end of second term so as to indicate the teachers' everyday functioning modes. Each teacher was observed for 10 minutes on six occasions and the results of this monitoring are detailed in Figure 6.



TEACHER A



TEACHER B

FIGURE 6: Proportion of Teacher Verbal Utterances in Year One.

On inspection of Figure 6 it can be seen that for Teacher A 50 percent of the total utterances were reinforcement statements (General Praise plus Descriptive Praise) while for Teacher B 44 percent of the total utterances were reinforcements. No disapprovals were observed nor was use made of Time-Out. However, as in previous years, the development of fluency in the use of descriptive praise statements appeared particularly difficult to cultivate.

E. SUMMATION

The Behaviourist Program presents itself as a self-contained evaluating package. It stipulates that educational objectives be behaviourally defined. By doing so, objectives are made accessible to measurement, the program appeared effective in achieving the stipulated child-centred objectives. Teachers found the program relatively easy to implement and managed to meet most of the prescribed criteria. Parents were satisfied with the program and parental involvement developed over the year. The Behaviourist Program would appear to be a viable model for a school to adopt if its objectives and practices are valued by teachers and parents.

3. THE COMPETENCY BASED PROGRAM AT MADANG AVENUE SCHOOL, 1979

INTRODUCTION

The curriculum of the Competency Based Program had as its major emphasis the mastery of those competencies considered to be closely related to school success. These competencies, specified by teachers, administrators and parents, were formulated on the basis of relevant principles suggested by child development theories. The competencies extended across the cognitive, affective and psycho-motor domains and children were exposed to target and/or enrichment experiences in each of these areas at a level appropriate for each individual's ability. (See previous Annual Reports)

In 1979 the Program operated in Year One previously it had been implemented in Kindergarten and in the preschool attached to the school. All children who had been in the treatment Kindergarten class in 1978 continued in the treatment group in 1979. Approximately two thirds of the class had attended the treatment preschool, whilst the balance of the children had no prior preschool experience. The non-treatment Year One class comprised ex-preschoolers, non-preschoolers and children who were repeating Year One.

PROGRAM AIMS AND OBJECTIVES

As in previous years, the curriculum of the Competency Based Program incorporated target competencies in a thematic approach; thus a variety of learning experiences leading towards mastery was included in the introductory, developmental and concluding stages of each integrated theme. The sequence and rate of introduction of these experiences varied for different children according to their achievement levels.

The major curricular groupings in the program clustered around language and communication skills, cognitive skills, social skills, physical skills and creative expression. Using the school context and the abilities of the children as a frame of reference the teacher developed the following broad aims for the program :

- To develop skills, concepts, attitudes and behaviour appropriate to each child's stage of development
- To create an atmosphere for enjoying and wanting to learn at school
- To involve parents in their child's learning both at home and at school.

CURRICULUM ORGANISATION

As stated earlier, the program was developed through a number of integrated themes which were organised into areas of study by focus and contributing questions, as follows :-

Term 1 : 'Food'

Why do we need food? -
- What do we eat?
- Which plants give us food?
- Which animals provide food?
- How do we get food from the sea?
- Do we have special foods?

'Health and Safety'

What is 'being healthy'? -
- Does our posture help the way we grow?
- What is 'personal cleanliness'?
- Why do we need teeth?
- Are sleep and exercise important?
- What food and drink do our bodies need?
- Who looks after the health of people in Mt Druitt?

What is 'being safe'? -
- How can we avoid being hurt at home?
- Why do accidents happen at school?
- How should we cross the road?
- What rules should we know before we go near deep water?
- How can we use fire safely?

Term 2 : 'Australian Animals'

What is an *Australian* animal? -
- What is a native animal?
- Why is a koala so well liked?
- What is a wombat?
- Why is a kangaroo so unusual to look at?
- Why is the ring-tail possum so called?
- Isn't it a duck?
- Can it fly?

'Our Community'

What is a community? -
- Who lives in our community?
- Who lives in our street?
- Why do people live in houses?
- Why do we go to school?
- Do we need shops?
- Do we need parks and reserves?

Term 3 : 'Clothes'

What *are* clothes?	-	Do people need clothes? What are clothes made from? What did cavemen wear? How did people make material and clothes before they had machines? Why do fashions change? What do people in other lands wear? How does climate influence what we wear? Do we have 'special' clothes for 'special' occasions? How do we care for our clothes? What is a 'uniform'? Which people wear uniforms? Why do people wear uniforms?

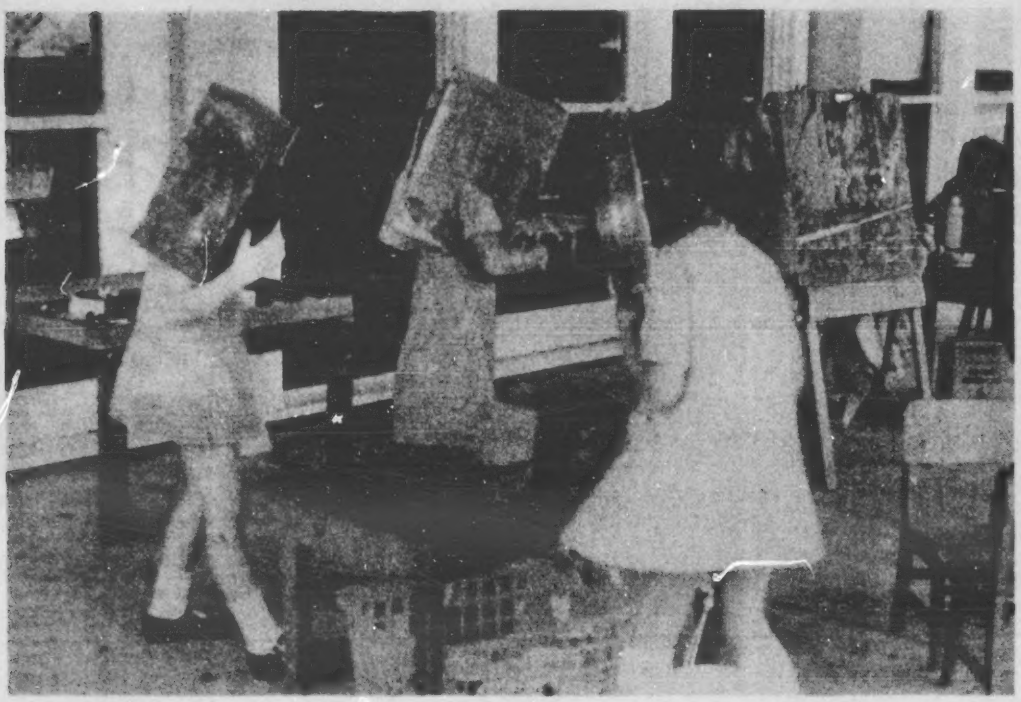
'Christmas and Fantasy'

Why do we celebrate Christmas?	-	When was the first Christmas? How do we celebrate this Festival? Is Christmas celebrated differently in other lands? Does everyone celebrate Christmas? What are some other important festivals?
What are fairytales?	-	Are fairytales true? Who are the characters in fairytales? What is 'magic'? Do different peoples have different fairytales? What special powers do people and animals have in these stories? Which are the favourite stories.

For some curriculum areas, viz., reading, number and spelling, material additional to theme-related content was included in the program. Thus, whilst children read and wrote stories about, e.g., Australian animals, their visit to the zoo, shopping at the supermarket for food, etc., they also engaged in the 'pragmatic language lessons' which were a key component of the Mt Gravatt Reading Scheme used by the class. Associated with these experiences, the children used 'Break-through to Literacy' materials (which had been modified by the substitution of Mt Gravatt vocabulary for Breakthrough vocabulary) to construct their own stories related to both the Mt Gravatt readers and their theme-related activities. Word attack skills were emphasised during 'pragmatic language lessons'. (These lessons involved putting the child in a realistic language interaction situation and developing sight word, phrase and short sentence vocabularies associated with

these situations. Phonic attack skills were emphasised in spelling lessons, for which Hay and Wingo phonics-based reading and spelling scheme was used. For added variety children used graded supplementary readers at levels appropriate for their abilities, and borrowed books for home reading from the class and school library. A Perceptual Skills Development Program was also used by the class to consolidate and continue the discrimination activities commenced in Year One. Children worked individually at their own pace and at the appropriate level on the graded and comprehensive visual and auditory discrimination tasks included in the program.

Whilst most number work undertaken by the class was theme-related, additional, more formal work in counting, number recognition, addition using counters, rods and numberlines was commenced at the beginning of the year. This was extended to simple subtraction, multiplication, fractions and number sentences using brackets. After children had used money in real and play shopping activities, the previous processes were incorporated into money activities. Space, shape, measurement and time were generally introduced and consolidated through informal activities.



Self-expression through dramatic play

COMPETENCIES AND THE CURRICULUM

The specified competencies were translated into specific target goals for each theme, as shown in the following examples :

LANGUAGE AND COMMUNICATION SKILLS

Area	Associated Objectives
1. Language as a tool of social interaction	can speak clearly and confidently to teachers and peers on own ideas and experiences.
	can develop a series of ideas and converse in appropriately constructed sentences.
2. Language appropriate to themes and other classroom activities, eg. stories, poems, reading and writing activities	Acquisition of vocabulary and concepts associated with themes and other classroom activities, e.g.,
	Ability to label foodgroups; types of foodstuffs produced by animals, etc.
	ability to describe, (using senses), a piece of fruit; a favourite meal.
	ability to explain what happens when we eat too much; how to 'set' the table.
	ability to predict what might grow next on a plant; what will happen to a plant deprived of water or sunlight.
	ability to recall ingredients of a recipe; words of a poem; sequence of events in a story.
	ability to express feelings verbally and state 'how I felt when it was my birthday party.'
	ability to express feelings non-verbally and show 'this is how the Troll looked when he was angry.'
	ability to articulate clearly and correctly the main idea in a story.
	ability to see relationships between, e.g. teeth and eating, etc.

CATEGORISING SKILLS

1. Class or category	ability to group words and pictures according to beginning sounds.
	ability to sort clothes according to categories - what made from; who wears etc.
	ability to generalise - determine which foods are 'good' and 'bad' or which fabrics are best suited to hot, cold or wet weather, and justify classification.

Area	Associated Objectives
2. Seriation	ability to order on the basis of size, number, quantity, mass, time - large clothes to babies clothes.
	ability to order on the basis of position first, second, third ...last.
	ability to sequence events - eg., cleaning an item of clothing; dirty, soaked, washed, dried, ironed, hung-up, worn.
3. Conservation Understands number	ability to identify and discriminate among sets having same number of members, different number of members, exactly the same members; sets which are greater/ larger/heavier etc. than others, e.g., kangaroo, emu, wallaby/possum, koala, platypus.
One to one correspondence	
4. Measurement	ability to measure using informal units (ruler or pencil as one unit, e.g.,) one's bedroom, shoes etc.
5. Spatial Relations	ability to denote spatial relationships e.g., in bedroom - what is next to your bed, etc.

PERCEPTUAL AND MOTOR SKILLS

1. Discrimination	ability to distinguish: objects - e.g., uniforms associated with different occupations letters, words and sentences - recognition and reproduction - related to themes and reading books; e.g., reading and writing sentences about the Australian animals seen on a visit to the zoo.
	vowels and consonants and pair them with appropriate letters.
	sounds, especially gross differences in quality, pitch, tone and volume - sounds of various types of traffic passing through the community.
	smells - e.g., odours of various foods. tastes - e.g., the flavour of various foods.
	by touch - e.g., the feel of various cloths from which clothes are made.
2. Fine Motor Co-ordination	ability to control small muscles when drawing, writing, copying, cutting, pasting, constructing, sewing, knitting, tracing etc.

Area	Associated Objectives
3. Gross Motor Co-ordination	ability to control large muscles when throwing, catching, bouncing, batting, balancing, hopping, skipping, jumping etc.

SOCIO-EMOTIONAL DEVELOPMENT

1. Realistic concept of self as initiating and controlling agent	ability to plan, initiate and persist in actions.
2. Problem solving behaviour	ability to ask questions, analyse results and draw conclusions - e.g., conclude from watching experiments that plants need sunlight and water to survive.
3. Self reliance	ability to care for own property, clean up after own activities, etc.
4. Realistic Appraisal of own levels of abilities and skills	demonstrates positive attitude to tasks, seeks assistance where appropriate.

PRO-SOCIAL BEHAVIOURS

1. Attention-getting	ability to use appropriate means of attracting and maintaining attention - hand raising, speaking clearly and audibly, etc.
2. Role-taking	ability to adopt the perspective of another - through use of masks, mime etc.
3. Respect for others	ability to accept opinions and ideas of others, even when contrary to own.

ORGANISATION OF LEARNING ACTIVITIES

The Competency Based Program is curriculum-centred rather than child-centred in its planning approach. The focus of the curriculum, however, centred upon individual instruction with each child achieving mastery in the various competencies at his own pace. Thus the ability of the child was used to determine the level of learning experiences provided to facilitate mastery and the child progressed from the mastery of simple to more complex tasks. Concept development was aided by the use of concrete materials which the children used in a variety of interesting activities. For certain periods each day the children engaged in self-initiated activities. During this time the teacher encouraged independent planning and implementation of activities, as well as the development of pro-social behaviours.

Unlike some of the other programs in the Early Childhood Project, no specific teaching style was specified for the Competency Based Program. The teacher interacted continuously with the children, helping, guiding, and instructing where necessary. Modes of instruction varied from large group activities with small group activity follow-up, (groupings were homogeneous - based on ability and each child engaged in activities at an appropriate level of difficulty) to individual instruction with the teacher or specialist teacher.* The particular emphasis upon individualised goals necessitated careful planning on the part of the teacher in order to satisfactorily match child with task, and detailed check-lists of progress in mastering competencies, together with comments on social behaviours were kept on each child's progress to expedite this procedure. Thus the child was presented with tasks which were challenging but not frustrating and his success, coupled with the teacher's praise, aided the development of intrinsic motivation in the child.

The day's program was varied between whole class, group and individual work, and between formal and informal settings. The weekly class time-table changed over the year as the children's ability to engage in more formal activities for increased amounts of time developed. For third term the timetable was as laid out in Figure 7.

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9.00 - 11.00	news	calendar	weather	assemblies	.....
	spelling	and	phonics	.....	
	number	.....			
	language	theme	writing	gross motor activities	
11.25 - 12.25	reading	.....			
	poetry	story telling and discussion		number	music and percussion
	free play	.....	and child-initiated activity		.....
1.45 - 2.30	number activity	reading activity	craft	science	.....
	television	language and science	craft	poetry	.....
	music	library	clubs	movement	story telling and drama

FIGURE 7: Timetable for Third Term in Competency Program.

An important aim of the program was the involvement of parents in the education of their children - studies have shown that such involvement benefits the child both academically and socially. A variety of approaches was adopted during the year in an attempt to achieve this goal, ranging from social occasions such as birthday parties and class barbecues to class open days, parent teacher meetings and parent working bees. These approaches met with some success. A small group of mothers assisted with some classroom activities, others regularly supervised groups for the gross motor program, a number of parents prepared materials for classroom use and many more attended class parent-teacher sessions, class social activities and accompanied the class on excursions.

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* A number of children with language and perceptual difficulties worked two or three times a week with the resource teacher on special individualised programs.

Self-directed reading activities

The Role of the Teacher

Whilst there is no specified teaching style for the Competency Based Program the role of the teacher is a demanding one. Because the program requires the individual, sequential structuring of learning tasks and the provision of small group activities, constant supervision and detailed record keeping is necessary. The program has therefore been most fortunate indeed to have such a competent and enthusiastic teacher as Miss Beckett. Although the program is teacher-centred, the climate of the class has been warm and supportive, with the particular needs and interests of the children catered for in all activities. Thus even formal large group activities incorporated considerable variation to maintain attention and interest.

The Classroom Environment

The classroom provided an attractive and stimulating environment for the children. Large wall displays related to themes were made by the children during craft activities, as were mobiles, models and props for fantasy play. The room was arranged to provide a number of learning centres of interest - science, art, library and quiet reading, fantasy play, and number activities.

Tables were grouped together in order to assist co-operative group experiences and to provide adequate space for play and free activities. Shelves, housing toys, books and other materials acted as area dividers. Toys and equipment which were attractive, colourful and durable had been specially selected to cater for the interests and abilities of class members. Also included were a number of games with rules which could be played by 2-4 children working together, e.g., snakes and ladders, checkers and mosaics such as 'build a city'. As with the Kindergarten class in 1978, carefully graded discrimination and number games, construction sets and carpentry tools were also available. The room was carpeted, heated and equipped with ceiling fans; sliding glass doors opened onto a flat grassy play area; comfortable cushions were available for quiet activities; and a large sink and wet area were used for painting and water play.

Evaluation Measures

In addition to the measures gathered on all children in the Project, children in the Competency Based Program were assessed on their achievement of program objectives. A series of criterion-referenced performance tests, based on those used previously in the program were developed for each of the competencies. An example of these appears as Figure 8. Children's progress was recorded on checklists throughout the year. These tests were used at the beginning of the year in order to group the class according to abilities, and sections of them were used during the year to aid program development. They were used in an extended form incorporating more difficult tasks at the end of the year to evaluate program goals. The competency checklist appears as Figure 9.

Results

Overall, the specified cognitive and affective objectives of the Program were achieved.

Language and Communication Skills

For all but five children, the development of clear, fluent speech and the use of language in class and social interaction has been most satisfactory. Children readily communicate ideas and initiate and carry on conversations. Vocabulary has broadened throughout the year, and 82% of the children have met criterion or above for the verbal skills of explaining, describing, labelling, predicting and recalling. Expression of feelings verbally and non-verbally has shown considerable development during the year, but more experience in mime, fantasy and dramatic play would be an advantage.

Each of the five children referred to above has received remedial assistance during the year. Two of the children, who are migrants, have followed an intensive E.S.L. program; one, who is partially deaf and has very poor eyesight, has been receiving medical attention and attending speech therapy sessions; the other two who both display minor speech defects, immaturity of speech patterns and exhibit some shyness have received attention from the resource teacher and school medical sister.

CATEGORISING SKILLS

Ability to form concepts

Goal: Child can compare and contrast, and verbalise, principles underlying familiar concepts, viz., same, not the same, different, like, unlike, alike, is, is not. (child should be able to form new concepts centering on classroom themes appropriate to age).

Given objects which are a) the same, and b) different in e.g. size, shape, colour or pattern, the child can select them according to verbal direction, e.g. find 2 objects that are the same. Child will be able to explain why objects are the same or different.

Ability to sort

Goal: Child can sort objects, pictures or objects according to familiar qualities, functions, or relationships, and label, describe, or give verbal explanation for basis of sorting. The child can also sort appropriate objects in more than one way, sorting from a mixed selection; logically eliminating or including objects in a group.

Ability to ordinate

Goal: Child can order on the basis of size, number, time and position. Child can order according to size: given extremes out 5/6 objects, child can fill in intermediate objects in proper place. Child can order groups according to number in group.

Ability to conserve

Goal: The child can match objects 1-1, with and without physical correspondence; child can physically place objects in 1-1 correspondence; child can establish 1-1 correspondence without physically matching.

Goal: Given examples of substances of unequal mass, child can identify which has more, which has less.

Goal: Given liquids, child can perform similar operations to those listed above.

Ability to measure

Goal: The child can use a variety of terms and methods related to the measurement of discrete and continuous quantities. The child can count correctly a group of objects up to and including 50 extension 100, e.g., how many apples. The child can distinguish time relationships, comprehending and using a variety of terms viz., a long (longer) time, early, late, before, after, today, tomorrow etc.

FIGURE 8: Performance Test Evaluation in Categorising Skills

NAME ..... preschool/non-preschool

Competency Checklist Date :

1. Language and Communication skills

To be able to
- Use language in social interaction
- Use language to explain
  - describe
  - label
  - predict
  - recall
  - express feelings verbally
- Express feelings non-verbally
- Use non-verbal clues
- Articulate clearly and correctly

2. Categorising skills

To be able to
- Form concepts - understand :
  - same
  - not the same
  - is different
  - is not different
  - like
  - unlike
  - alike
- Sort
- Ordinate
- Conserve - one-to-one correspondance
  - continuous quantity
- Measure
- Denote spatial relationships

3. Health and Safety Maintenance

To be able to
- Know appropriate health behaviours
- Observe appropriate health behaviours
- Know appropriate safety behaviours
- Observe safety behaviours

4. Perceptual and Motor Skills

To be able to
- Distinguish by
  - touch
  - sound
  - sight
  - size
  - shape
  - colour
  - letters
- Construct
  - copy
  - draw
- Control large muscles
- Control small muscles
- Demonstrate adequate hand-eye coordination

Non-Teachable Competencies

5. Socio-emotional Development - Realistic Concept of Self as Initiating and Controlling Agent

Problem Solving Behaviour

To be able to
- Plan action
- Initiate action
- Persist in action
- Ask questions
- Analyse results and draw conclusions
- Demonstrate self-reliance
- Demonstrate realistic appraisal of own levels of abilities and skills

Attitude to Schooling
- Expressed desire to come to school
- Demonstrated enjoyment of school activities

6. Pro-social Behaviour

To be able to
- Assume appropriate social behaviour
- Get attention
- Maintain attention
- Adopt the perspective of another
- Respect the individuality of others

FIGURE 9 : Competency Checklist Year One, 1979.

Categorising and Mathematical Skills

The acquisition of these skills was very satisfactorily achieved in most areas by all children; 92% of the children have progressed well beyond criterion in the understanding of number, one-to-one correspondence, sorting, seriation and ordination; whilst 4% reached criterion and 4% made slower progress. Similar pleasing results were achieved for the operations of addition and subtraction - here 89% met the advanced criterion level and the remaining 11% achieved mastery in these areas.

The criterion for multiplication was met at the advanced level of 18.5% of pupils, whilst 70.5% satisfied requirements and 11% made slower progress. Problem-solving behaviour has shown considerable development; 7% met the advanced criteria, 78% achieved mastery and 15% progressed at a slower rate.

Perceptual and Motor Skills

Reading and discrimination goals have been achieved by most children. 85% have achieved mastery level or above for oral reading; 67% have attained similar standards for comprehension, however for 33% of the pupils progress was slower than desired. Word attack skills and knowledge of sounds were mastered by 88% and 89% of the children respectively.

Mastery level and above was achieved by 86% of the class for spelling; all but four children have spelling ages higher than their chronological age - in 63% of cases spelling ages were more than six months above chronological age. The four children who were exceptions were those referred to earlier because of their poor language skills.

Gross and Fine Motor Skills

All but one child met requirements for fine motor skills very satisfactorily. Most children successfully completed the gross motor program in all areas. Only four children failed to meet the criteria in the area of balance.

Social Skills

Generally the children in the class were thoughtful of others, and socially adept; they demonstrated ability to care for property and to observe class and school rules. Over 75% were well able to follow instructions, work independently and seek help where necessary; 70% were able to participate appropriately in group activities. Overall considerable progress has been made in these areas by the children during the year.

CONCLUSION

The overall atmosphere in the Program classroom was one where children busily went about their activities with interest and enthusiasm. They cooperated with each other, not only in play and construction situations, but helped each other on more formal tasks, and interacted generally in a positive and friendly way. They enjoyed coming to school and progressed most satisfactorily as a result of being productively engaged in a wide variety of interesting, appropriately sequenced tasks. This progress was obvious, not only from the above results, but also from the teacher's ratings of child's abilities and behaviours on the Year One Mt Druitt Yearly Observation Schedule. All but six children were rated as above average on a significant number of the abilities and behaviours listed. Further remedial programs had been implemented for those children rated as in need of special help.

The class teacher was most capable in her implementation of the program. An analysis of the teachers' classroom language, using the T.L.I., showed that over 35% of teacher verbalizations were designed to improve the child's knowledge; 25% of the utterances served to instruct or motivate and a further 25% of utterances were designed to foster a warm and supportive classroom climate; such behaviours were consistent with the aims of the Competency Based Program.

That the program has been so successful has been due in large part to the enthusiasm and support of the cooperating teacher, the school personnel and the parents.

Perfect balance needs practice

4. THE COGNITIVE PROGRAM IN YEAR ONE AT DAWSON PUBLIC SCHOOL 1979

PROGRAM DEVELOPMENT

As in previous years, the Year One program was based on Weikart's Cognitively Oriented Curriculum (see 1976,1977,1978 Annual Reports),but developed even more independently than in the preschool and Kindergarten programs. Although for the particular experimental follow-through group the implementation of the specific curriculum details was less definite, a re-orientation and sensitization of the total infants' school program generally towards cognitively based objectives was worked. This was because of a commitment to the difficult coordination task by the Infants' Mistress, the continuing perseverance and ingenuity of the experimental teachers and the flexibility of other teachers. In some ways this "sideways" drift is more theoretically sound and practically viable. It signifies attention to a particular teaching and learning mode but no wholesale adoption of a model. There are important insights to be gained from working with a program akin to Weikart's, but they are at odds with many of the expectations and everyday practices of teachers. Continuation of the Cognitive Program in the preschool and Kindergarten, as well as its development in Year One, is some testimony to its flexibility.

As with the Kindergarten program, detailed learning experiences in the content areas needed to be developed within the general framework of the Cognitive curriculum. This meant the push towards the existing programs continued, especially for reading and mathematics, to reduce the demand of simultaneous program development and implementation. The very specific constructs of the Cognitively Oriented Curriculum were re-formed into broader categories to generate new ideas. For example, the classification tasks of the preschool hardly resemble the complex integration of cognitive skills required even to play the games six year olds make for themselves. Further, children were developing their own complex ways of operating which demanded a more sophisticated curriculum response which allowed for such developments.

A number of different planning schemes were tried and reworked until a usable one was settled upon. This enabled activities to be generated for children and strategies for teachers, consistent with the basic goals and efforts of the curriculum. Further, structures for the systematic treatment of skills were also incorporated into the planning schemes. The outline of this planning follows.

Overall Goals For Year One

The program conceived of goals in the context of active experience in the physical and social world.

Physical experience: action involving observation, exploration for the acquisition of knowledge about the properties of objects and events (e.g., temporal causal relations).

Logical - mathematical experience: actions such as combining, separating, equalising and arranging in various forms and orders.

Social experience: self-determination and regulation negotiated within the context of group forms and procedures.

Representation: personal and formal construction/communication of ideas and techniques. Experience of the personal and formal representations of others.

The goals prescribed a classroom learning environment which supports

- child activity in the form of independent planning and self-evaluation, the use of materials, and communication of discoveries to others.
- interaction among children in the form of co-operative projects, social-dramatic play, group discussions and other activities that involve the exchange of ideas.
- a variety of natural materials that encourage children to discover attributes, uses and concepts.
- natural and commercial materials that encourage development of cognitive structures (classification, seriation, time, space, number, causality).
- teacher observation and interaction with children for the purpose of discovering their levels of functioning in various areas of development (language, concepts, skills, attitudes).
- directed and independent activities to take place simultaneously.
- a daily routine that helps children develop awareness of time relationships and planning.
- different group contexts - total group (circle); small group (planning, representation) as well as independent activity.
- learning centres focussing on particular content areas (maths, science, reading, social studies, writing); on interest areas (housekeeping, construction, painting, dress-up, puzzles, animals); or other types of activities (sensory training, rhythmic/physical activities, social-dramatic play).
- pupil planning of activities independently and in groups.
- pupil representation (discussion, description, evaluation, development) of their plans and work.

These goals determined teacher planning and sequencing of specific curriculum content within the learning context.

Specific Goals

The specific goals laid out for the Cognitive Program indicate the areas considered important. Cognitive goals received most emphasis, while attention was also given to social affect and psychomotor goals. The areas and skills included in the planning and development of the Cognitive Program in 1979 are listed below.

COGNITIVE GOALS

Logical Knowledge

- association/classification
- seriation/ordering/arranging
- spatial relations
- temporal relations
- number
- prediction
- causation

Physical Knowledge

- properties and relations between objects and events

Social Knowledge

- social forms and practices

Representation

- expressive
- formal

SOCIAL AFFECT GOALS

- co-operative/negotiating styles
- self regulation of behaviour

PSYCHO-MOTOR GOALS

- development of physical strength
- co-ordination, balance and rhythm skills

Of course, there was often a mix of goals in the experiences/activities planned. No restricted correspondence of particular goals to particular activities was prescribed, but rather contexts were developed in which the achievement goals were attempted. Certain of the logical knowledge skills did have obvious mathematical/science and social study contexts and within these content areas flexible child-planned activity was supported as well as the more traditional, sequenced instruction. Activities in acquiring, organising and communicating information were also planned.

For example:

Acquiring Information

- observing-directly with the senses
- asking questions
- estimating, counting, measuring
- listening
- reading
- manipulating
- problem solving
- interacting and co-operating with others

Organising Information

- ordering
- recording
- asking questions
- estimating, counting, measuring
- classifying
- inferring
- manipulating
- problem solving
- interacting and co-operating with others

Applying/Communicating

- talking
- writing
- asking questions
- predicting
- hypothesizing/generalising
- test/experimenting
- problem solving
- interacting and co-operating with others

Representation, formal and expressive, as well as intrinsically part of the child's work was seen as a process which was developed through communication - verbal, artistic and rhythmic.

Planning Content

In a direct way, the goals were able to incorporate the usual structured content areas.

Goals	Content Areas
logical, physical, social knowledge	mathematics, natural science, social science
representation	
expressive	language, art, craft, music, movement, dance
formal	language, drama, reading, writing
psycho-motor	gymnastics, games, movement, dance

Any of the content areas were the location of any of the goals. The everyday procedures of the school and classroom and the patterns of interactions among children and adults established the context.

Routine

The two-teacher open plan classroom arrangement was continued but only remnants of the daily routine remained. The 'plan-work-represents' sequence now, even more so, seemed to be too much an artifact of the attempt to order cognitive processes. A more complicated composition of these activities was apparent. The planning model was still used to structure some individual and group activities to enable the teacher to track the progress of work and relate representations to activities and plans.

Learning symmetry through construction

Groups were formed on the basis of different reading levels. For the morning session, two groups were formed. Each group completed activities with both teachers in turn. The teachers, too, rationalised their planning and area responsibility. The rooms were separated into reading/writing areas and maths/science areas. Groups alternated between planning and working in other areas or at reading activities. These were prepared around integrating themes, and were generative areas rather than subject divisions. Unlike the pre-operational requirement for objects and actions, representations now became the motivating force for actions and responses. In some cases, investigating the properties of some objects was the beginning for responding to and planning further activities; and in other cases a story or an illustration motivated action. The reading program provided a systematic base for many individual and group extension activities. Similarly the mathematics program compiled from a variety of environmental mathematics resource materials was able to generate other activities. Certainly, reading a story could lead to ordering and counting, just as exploring with magnets or measuring could require recording or inspire writing.

The mid-morning and afternoon sessions required more complicated routines to make use of general school resources but still involved children in decisions about types of activities and work plans. Representation became a part of activities rather than a separate stage in a sequence.

The program took most of the first term to implement. As the distance from the original detail of the preschool curriculum had increased so had the difficulties in prescribing new content. In some ways the press for curriculum continuity and consistency obscured the ongoing dynamic of many usual classroom situations. Overall though, the effort to rationalise procedures and content in terms of the model resulted in flexibility and a critical perspective.

EVALUATION

The set of goals reported in Evaluation of Cognitively Oriented Curriculum Follow Through Projects, November 1976, was used as the basis for evaluation, even though it did not at that time inspire especially appropriate measures. These basic goals were:

1. Ability to make decisions about what to do and how to do it.
2. Ability to define and solve problems.
3. Self-discipline, ability to identify personal goals, and capacity to pursue and complete self-chosen tasks.
4. Ability to participate with other children and adults in group planning, co-operative effort, and shared leadership.
5. Expressive abilities - to speak, write, dramatise, and graphically represent experiences, feelings, and ideas.
6. Ability to comprehend others' self-expression through spoken, written, artistic, and graphic representations.
7. Ability to apply logical reasoning in everyday situations.
8. Skills and abilities to formally and creatively represent knowledge and attitudes in science and physical movement.
9. Openness to the points of view, values, and behaviours of others.
10. Personal interest in ideas and work.
11. Longer-term developing interests which can be cultivated both in and outside of school throughout life.

These have been evaluated by several different methods. Process observations of children and teachers were made, using a modified form of PROSE. Results suggested that the program was implemented in accordance with the basic goals for both teachers and children. A range of traditional ability measures (language, mathematics, reading and so on) was also used and the detailed results are reported separately. While the scores for children from the Cognitive Program were generally the same as for other programs, some differences were found and these will be detailed in later publications.

Several observation checklists/rating scales were used to track less accessible behaviours. For example, planning styles (independence), work styles (production, creativity, perseverance), problem solving skills/styles (divergence, prediction) and expressive representation were rated on the Child Observation Rating Scale (see Figure 10). Although these have few normative references, they have been useful in a formative sense, to have teachers sytematically observe and plan on a basis of children's developing skills and styles. They also indicate changes in children's behaviour towards the goals.

Measures used in the summative evaluation of the Project do not adequately assess all of the program's goals. Internal objective and subjective assessment of the program's goals remained the only valid way of assessing the program's effectiveness. Often the program's impacts had to be discerned by implication. However, data from the use of checklists, YOYO and other rating schedules enabled the teachers to feel confident they had achieved most of the program's objectives.

COGNITIVE PROGRAM - YEAR 1, 1979

Child Observation Rating Scale

	+	0	-
UNSTRUCTURED PLAN/WORK			
PLANNING - Independence			
Group - Initiation			
- Following			
Elaboration			
- Graphic			
- Written			
WORK - Activities			
_____			
_____			
_____			
- Sequence			
- Independence			
Group - Initiator			
- Follower			
- Co-operation			
- Production			
- Creativity			
- Perseverance			
- Scope of task/s			
- Satisfaction			
PROBLEM SOLVING			
Maths - Multiplication/Division			
Attention			
Verbalisation (Questioning)			
Participation			
Strategy			
Deduction			
Relevance			
Divergence			
Action			
Symbol			
Prediction/Estimation			
Decentre			
EXPRESSIVE REPRESENTATION/ROLE PLAY			
Initiation			
Group Participation			
Fantasy			
Action			
Verbal			
Written			
Graphic			
Interpretation			

FIGURE 10: Child Observation Rating Scale

5. THE HOME BASE PROGRAM - BIDWILL PUBLIC SCHOOL

HOME TEACHING AND PARENT INVOLVEMENT IN THE TEACHING PROCESS

Historical Perspectives

The findings of recent research into the education of the "disadvantaged" both in Australia and abroad have shown clearly that while programs or curricula may vary in their effects on different sorts of children, the interest and involvement of the primary caretaker is vital to each child's acceptance of education. It affects his level of participation, his attitudes towards learning and his motivation to succeed.

The question of how and at what level the parent will be involved is a current issue in N.S.W. schools. The focus is primarily upon preschool involvement, partly because this is the easiest to capture and partly because it has been believed that parents are more readily open to influence from educators and child development experts when their children are very young. Relevant to the whole issue of parent participation in education is the growing body of knowledge about mother speech, family role perspectives, and the cognitive as well as the behavioural functions of parental styles of management.

Preschool 1979 : Three Different Approaches to Parent Involvement

With the opening of Bidwill Community School's new building complex in 1979, the Principal and Infant Mistress took the opportunity to develop and evaluate different organisational approaches for their preschool classes. To perform this task the school invited the Project to carry out the necessary developmental and evaluation activities subsequent upon the approval of the Department of Education.

The demands of parents for sessional experiences were met and alternatives were offered, especially when teachers perceived evidence of additional stress to the family or problems in the development of the children.

The alternatives were:

1) the home based service already developed and successfully operating,
2) a mixed model which would permit two or three sessions per week plus a home visit perhaps once per fortnight.
3) sessional only, with parent involvement on a day-to-day basis.

However, the importance of involving the mother at an earlier than preschool age was recognised in the support given by the Infant Mistress to the development of playgroups which could make use of one of the units for one day in each week. For the first time a teacher was to play a part in the inception of playgroup activities but would hand over the responsibility to parents while retaining her position as adviser.

Various organisational possibilities were considered, but several factors influenced decision making so far as the preschool model was concerned. First, there was the uncertainty about parents' real needs or wishes; second, the architecture of the new buildings made simultaneous space-sharing difficult; and third, administrative constraints limited the potential choices available. An additional hardship was the delay in the arrival of equipment for the sessional activities until week 7 of Term 1. This delay enabled the new teachers to have the experience of getting to know the community through home visits.

Mothers also could bring their children to school from time to time and accustom them to the physical environment, often finding opportunities for informal chatting with teachers. This was beneficial for them and also for the teachers.

While the effects and benefits of both sessional and Home Base Programs have been documented, the advantages of a *mixed program* have not been explored. The essence of providing sessions for the mixed group was to meet the expressed desire by parents for "real" preschool activities, not playgroup activities. The differences they perceived were the greater degree of structure in preschool and the greater flexibility of the mother to absent herself from time to time. It was argued that any additional pressures placed on teaching staff would be easier to deal with in a team teaching setting.

Another advantage of the mixed program concerned the "atypical family". The home visit at fortnightly intervals could be used to understand the home situation and to assess the abilities and difficulties of both parents and children. The sessions at school could be directed to involving the child in activities with children of normal or advanced social and/or intellectual development.

The variety of options offered by the mixed program was perceived by some parents. These parents were often highly motivated but felt that two, or ideally three sessions, were enough for the socialisation of their children. The mixed program catered for the needs of these families very well.

Looking the part is important: preparing for drama

Evaluation

There was a broadly based data collection, consisting of mothers' perceptions, teacher observation of mother and child, and the mother interview. These measures were concerned with the central variable of the quality of parent involvement. Because of the range of programs available, the independent variable, the degree to which the teacher could actively engage each mother on a one-to-one basis, could be controlled. It was expected that the greatest amount of time would be given in the Home Base Program, followed by the mixed, and finally the sessional. However, since each teacher in each program would consider it her responsibility to encourage parent involvement in the ways best suited to the style of the program, it would be necessary to know whether the parent had similar expectations in enrolling their children.

The data collected were chiefly impressionistic but were intended to summarise both the parents' and teachers' opinion of the quality of parent involvement in all three programs offered at the school.

1) Mothers' Perceptions/Expectations of Preschool

Teachers and aides at the school interviewed mothers and asked them to comment on -

a) their reasons for selecting a particular program
b) their expectations for preschool
c) their appreciation of changes in their children
d) their evaluation of gains for themselves

Table 1 shows the ranking of the reasons given by parents for selecting a particular program, in response to an open question.

TABLE 1: Reasons for program selection (open question) N=82

Rank Order	Reason I		Reason II *	
1	Best for him (her)	21%	To mix with other children	11%
2	Prepare for school	17%	Best for him(her)	8.5%
3	To mix with other children	10%		
4 Equal 4	Mother can only manage part-time	8.5%		
	Child can only manage part-time	8.5%		

* 46% had only one reason

Table 2 sets out the expectations parents had for preschool. Twelve alternatives were given for mothers to consider under the question "Do you think preschool should ...?" Table 2 lists them in order of rank from 82 interviews.

TABLE 2: Expectations of preschool by mothers, ranked in order of frequency (expressed in percentages) N = 82

Rank	Expectations	Preschool will not do this		Response Categories		Preschool will definitely do this
		0	1	2	3	4
	Preschool should ...					
1	Prepare child to get along at school	1	0	9	21	70
2	Be fun	0	4	13	18	65
3	Help him to get used to being away from mother	4	5	15	22	54
4	Make him confident in himself	5	1	28	20	46
5	Help me to learn how to teach him better at home	10	6	17	27	40
6	Teach him things like numbers and new words	13	20	21	15	30
7	Give me a chance to have a rest from being with him all the time	32	6	22	12	28
8	Improve his behaviour	28	12	22	15	23
9	Help me to understand him better	24	15	30	12	20
10.5	Teach him to concentrate)	15	12	24	32	17
10.5	Help sort out any problems)	24	15	28	16	17
12	Give him more attention than he has now	54	11	12	5	6

Eighty percent of parents believed that all children should go to preschool if they could. Those who refrained from making this generalisation said it depended on the parent or on the child. The reasons given were similar to their own reasons for selecting preschool and generally were "to prepare the child for school and to help him socialise".

There were no significant differences in expectations for preschool for mothers who chose different programs. However trends are fairly strong on two of the items "help sort out any problems" and "give me a chance to have a rest from being with him all of the time". The mothers whose boys were enrolled in the *mixed group* rated "help in sorting out problems" above average while mothers of girls in the sessional group rated this even higher. Otherwise the mean rating was less than 2 out of 4.

The other expectation of free time for mother was held at above average rating by mothers of boys in both sessional programs and again mothers of boys in the mixed group. This trend was more clearly sex oriented than program oriented. A trend more clearly program oriented was for the selection of item 1, "teach things like numbers and new words", by mothers of the sessional group compared with mothers in the two other groups. These figures indicate that the expectations mothers had of the preschool experience, influenced this choice of program. Such trends point to the value of offering a range of options where possible.

2. Teacher Observation of Mothers and Children

Observations collected from teachers included :

i) their impressions of the 'first day' behaviour of mothers and children

ii) a record of the frequency of attendance and the quality of the mothers' interactions with children in the preschool

iii) their observations of children and judgments of their performance on certain dimensions.

Except for the 'first day' impressions, other data were collected in first term and third term of the school year, so that any changes in behaviour could be noted.

i) First day Impressions

Teachers were asked to record their impression of the 'first day' behaviour of their mothers and children in these categories.

a) Mother came - yes/no

b) Quality of mother's participation - 1 to 4

c) Child was willing to come - yes/no

d) Child was able to separate from mother - yes/no

72% of mothers came to the preschool on their child's first day. The mean quality of their involvement was 1.7%. Out of all the early enrolments 79% of children were willing to come. 54% of children failed to separate early from their mothers.

ii) Parental Participation in Program

Mother participation was rated in terms of frequency of attendance and quality of involvement as shown in Tables 3 and 4 which give data for the whole group. There were many parents and children for whom only one record was made due to late startings and absences. The purpose was to compare the first and third term observations. Only those cases for which there were two observations for the mother and two for the child were included.

TABLE 3: Comparison of mother's frequency of response as perceived by teachers in Terms 1 and 3 (N = 88)

How often	Frequency Term 1	Term 3
never	35	31
sometimes	26	21
often	27	36

TABLE 4: Comparison of mother's quality of response as perceived by teachers in Terms 1 and 3

Quality of Involvement		Quality Term 1	Term 3
(low)	1	7	5
	2	12	16
	3	14	20
(high)	4	20	19
NA *		35	28

* NA mother did not attend, consequently no data were collected.

These data indicated that according to teacher observations, the frequency of parent attendance at preschool sessions followed these trends: teacher 1 (mixed) a clear increase of attendance (N observations 16)
teacher 2 (mixed) no change (N = 17)
teacher 3 (sessional) no change (N = 22)
teacher 4 (sessional) some increase but with the majority no change (N = 29)

Teacher data on the quality of parental involvement produced mixed results. The mixed and sessional programs recorded an improvement in the quality of mother interactions with the preschool setting, while Teacher 2 (mixed) and Teacher 4 (sessional) noted a decline.

iii) Child Observations

The children were rated by teachers on a set of eight bipolar adjectives. The reason for choosing this style of description was that it forces the observer to consider each child in terms of a weighting towards one value or another. There was no middle rating. When only one adjective is responded to, an observer may show a continuous bias to scoring at the high or low end of the scale. This can still occur when bipolars are used, by the observer maintaining a position towards centre, but she is less likely to do this when one end of the scale is perceived as being more desirable than the other.

Table 5 shows how the group data compared in first and third terms on each pair of descriptors (N = 88). There is a shift towards the value "independent" as might be expected. Observations on the dimension "easily hurt" to "thick-skinned" tend to be bunched around the centre. Most of the change occurs at rating 5 which is strengthened in term 3 in nearly every case.

Eighty eight observations were collected in term 1 and term 3. Teachers rated the children as growing more independent, more assertive and showing growth and spontaneity. Children also became more friendly and responsive to adults and other children. Teachers judgments on one dimension "easily hurt - thick-skinned" clustered in the middle, and their ratings on the "quiet - talkative" dimension remained stable during the year.

TABLE 5: Ratings on individual dimensions (first and third terms)

dimension	1		2		3		4		5		6		dimension
dependent	1	2	7	4	13	10	12	7	33	29	22	36	independent
timid	4	2	15	13	13	12	17	15	19	28	20	18	assertive
restless	7	4	6	7	16	17	19	10	26	32	14	18	calm
constrained	2	0	11	10	15	13	13	16	27	34	20	15	spontaneous
easily hurt	7	3	19	15	18	18	16	15	22	25	6	12	thick-skinned
quiet	6	4	7	11	12	13	11	7	24	28	28	25	talkative
unfriendly	0	0	2	4	9	9	11	15	30	35	36	25	friendly
unresponsive	0	1	5	6	6	4	18	12	33	36	26	29	responsive

3. The Mother Interview

During second term a random sample of 62 mothers was invited to participate in an extended interview with an objective observer. The purpose of the interview was to obtain the mother's impressions of the preschool experiences of her child in her own words and to evaluate these impressions.

All mothers believed that their children had benefitted from their preschool experiences in all programs offered. Because mothers could frame responses in their own words a wide variety of benefits was mentioned. The set of variables referred to above all others related to the actual learning of various types of (e.g. formal, language, speech, creative activities). In addition, mothers referred to their child's interest in things, improved span of attention, or growth in independence.

Mothers also commented positively on factors such as making friends and mixing with other children. Behaviour towards others was mentioned in terms of their consideration for others, sharing and enjoyment. In general children were also more happy since attending preschool and were also better able to amuse themselves actively.

Some mothers also described their own gains e.g. "more time to myself", "doesn't cling to me" as being benefits of having their child attend preschool.

Special Developments and Future Projects

During 1979, other initiatives taken by both the school and parents resulted in some interesting programs involving parents in school activities. These programs were often based on a need shared by parents and children. In any needs based program, development depends not only on the identification of these needs but also on the emergence of proper leadership for the implementation of the response programs. In some cases the leaders have emerged from the ranks of the parents. In others the need has been recognised by a teacher who has been prepared to promote a program or a new style of teaching. Both kinds of development occurred during 1979 with interesting and tangible results. A parent-sponsored program has taken the form of an outreach to aboriginal families in the neighbourhood. Initiatives from teachers have resulted in parents being involved in language and mathematical programs at the school.

a) Aboriginal Involvement in the Teaching Learning Process

It has been remarked in public forums that aborigines are not often visible in the school context. Some educators have claimed that their lack of interest helps to cause educational failure amongst their children. Aboriginal educators believe that education will not be accepted as relevant to many of the indigenous families unless their own people are involved in planning and implementing educational programs. Such spokesmen for their race are not unrealistic. They believe that aboriginal people are often concerned about their children's education but feel powerless to affect it. If more of their own race were visible in the school it would be easier for the belief in their own powers to gain ground.

Out of the experimental group of Home Base families one such leader emerged in Bidwill. A mother of two school-aged children and with her youngest enrolled in Home Base she was at first reluctant to join the parent weekly group. However this changed miraculously in the follow up Kindergarten year when, in the setting of the community self help group, a problem emerged which focussed on the needs of an aboriginal family. Olive Brown became the resource person who provided the information and the names of contact persons who could provide assistance. At the same time it was made clear that she knew many other resources available to her race, some of which were educational. She had already identified a number of aboriginal families in the district with the intention of encouraging them to enrol in preschool. Also, her husband Colin Brown informed them of their legal standing with regard to the rental of homes built by the Housing Commission, with some joint funding from the Aboriginal Affairs Department. She had also had preliminary talks with teachers of her own children about the possibility of having some tribal input in their social studies activities. This was to provide information for all of the primary age group, but would be of special significance for the small group of aboriginal children.

With very little encouragement Mrs Brown was negotiating further possibilities with administrative staff and suggesting sources of funding. Overall these initiations have resulted in the following activities.

- The coordinator (Olive Brown) has the acceptance of all parents and is not just a minority leader (she was elected president of the P & C in 1979).
- The projected social studies program is seen as a pilot in a multistrand cultural study.
- After initial expenditure on resources from tribal and other experts, the community is expected to build up its own resources.
- The aboriginal families are seen as the indispensable source of follow through activities. In order that they can develop the necessary skills for this purpose the aboriginal families are offered both western and indigenous training.
- Several staff members are involved in collating all the resources for the school.

This is not the only parent sponsored school activity but is the only one which has reached this level of development. Such possibilities, it is realised, can be taken up only at a rate which does not cause undue stress on teachers or administrative personnel.

In reality, the teacher can be viewed as a contact person, a liaison between parents and school administration. The teacher who has close contact with the community, is well positioned to facilitate parental involvement in the school. Home Base preschool teachers, who have a special close relationship with parents, can actively and purposefully interpret and promote the roles of parents in schools. At the stage of their child's entry into preschool the parents are most accessible, but the communication skills of the Home Base teacher and her opportunity to enter homes facilitates this process.

Mothers help with reading activities

b) Teacher Sponsored Use of Parent Assistance in the Language Resource Room : An Attempt to Prevent rather than Remediate Learning Problems

Most teachers are familiar with the variation in language development amongst young children. At the senior pupil level this usually refers to either or both of two language dimensions, language as communication and language as the carrier of concepts. In the preschool and infants classes it is more difficult to distinguish these from one another. Teachers who are asked to select children for language enrichment generally choose a mixed group. The group is likely to include shy children, children with speech/articulation defects, children with behaviour problems and poor concentration, low ability children, bi-lingual children and children with a variety of language immaturities. The language teacher can screen these to some degree but she has neither the theoretical background nor the facilities required for adequate remedial services. Her best approach is to build up the child's self-confidence and to encourage her or him to talk in as many ways as possible. In most families this is the mother's role and mothers are well suited to the task because they know a great deal about their own children.

In 1978 the language resource teacher, Mrs Dobner, became interested in the Home Base program and attended several teacher meetings. A mother of four children, she was convinced of the need for parent participation in a language program. Also she saw the value of extra assistance in her classroom to develop the best possible child participation, ideally in a one-to-one conversation about some activity. Some children could not obtain this interaction with their own parents but might relate well to interested adults who were mother helpers.

When workshops were set up to give volunteer parents some understanding about the way in which language developed, the language teacher asked for parents to help. About 12 mothers showed interest in the project initially, but half of these withdrew. The reason seemed to be that mothers who were not confident conversationalists were not able to take many initiatives with reluctant children in the teacher's presence. The teacher gave support to the parents, especially to one whose own child was in the group from the Kindergarten classes in which Home Base children had been enrolled. Although the initial encounters between this mother and child were not productive, the teacher persisted in her support and found that the mother became one of her best helpers. Her child benefitted also.

One volunteer mother developed language screening techniques by making use of structured procedures in Distar and Peabody kits. For some mothers such structured materials had considerable appeal. Three mothers attended Distar workshops. The use of these techniques requires careful monitoring at the beginning and careful reassessment from time to time. The language resource teachers in 1978 and 1979 have preferred their more flexible approaches which suit a variety of children in each group. They have concentrated on the social communication dimension. This leads to a greater command of vocabulary if the experiences are varied, and the use of a greater range of grammatical forms to meet the requirements of the different language functions (enquiry, personal comment, giving information, organising resources, regulating the behaviour of others, and fantasy).

In addition to the regular provision of speech assessment and therapy by speech pathologists from the Polyclinic, it has been possible to obtain advice and ideas for language activities on an informal basis. Therapy is available for the few children who need it but the waiting time may be up to one year. Informal cooperation between speech pathologist and teacher can precede treatment and provide valuable preventative service. The social and intellectual consequences of prolonged speech disadvantage are intercepted and some preliminary headway is made in speech development.

Experience has indicated that it is in the realm of conversation that the main resource lies. Toys have been bought with funds from the Bernard van Leer Foundation to supplement school supplies and printed suggestions for language games are available in a kit. Fortunately the language teacher has the ability to draw mothers and children into conversation, and the conviction to sustain the effort. This seems to be the most valuable preventative measure taken by a teacher and one which could be extended with additional school support.

c) Mathematics, a Common Concern of Teachers and Parents

There is a relatively high degree of interest amongst teachers in Bidwill Infants' and Primary Schools in the interpretation of mathematical procedures to parents. Two particular developments occurred involving teachers and parents, which were successful for both, and will probably be continued by the school in future years.

A series of demonstration lessons in rod work was provided during Term 2 by Mr Bradbury, one of the teachers at the school, and these extended his experiences of cooperating in parent development in Kindergarten Mathematics in 1978. Mothers and children in his Grade II class enjoyed the experience. Several of these felt confident enough to take on regular work in Kindergarten or Grade I, not helping their own children but acting as teacher assistants. The survivors of the original group were competent mothers in almost, but not every case, Often unnoticed but outstanding, is the success of the parent who stays on in spite of low competency. If teachers were prepared to reinforce the involvement of the less competent they would find satisfaction in the development they had nurtured in the adult. The spin off, of course, is to that parent's children.

An additional project for fostering the interpretation of mathematical ideas, the mathematical aid workshop, was also started. A portion of the loft was set aside as a parent workshop and equipped with a few basic tools by the Bernard van Leer Foundation. The school carpenter has turned four school cupboards into work benches and covered them with laminex. Teachers in the Kindergarten classses at Bunya Road were asked to provide sketches or lists of their requirements and these were pinned to a board so that parents, male and female, were able to use their spare time, if they wished to make material aids. This was quite an exciting project because it was a resource for teachers with little outlay of school funds.

Moreover, the project provided a context for natural communication of mathematical ideas. Parents needed to know how the toy or game they made would be used. Then they used it in the classroom or it gave them ideas for play at home with their children. It is also a possible source, if teachers wish to use it, of information about what parents really do think and know about mathematics.

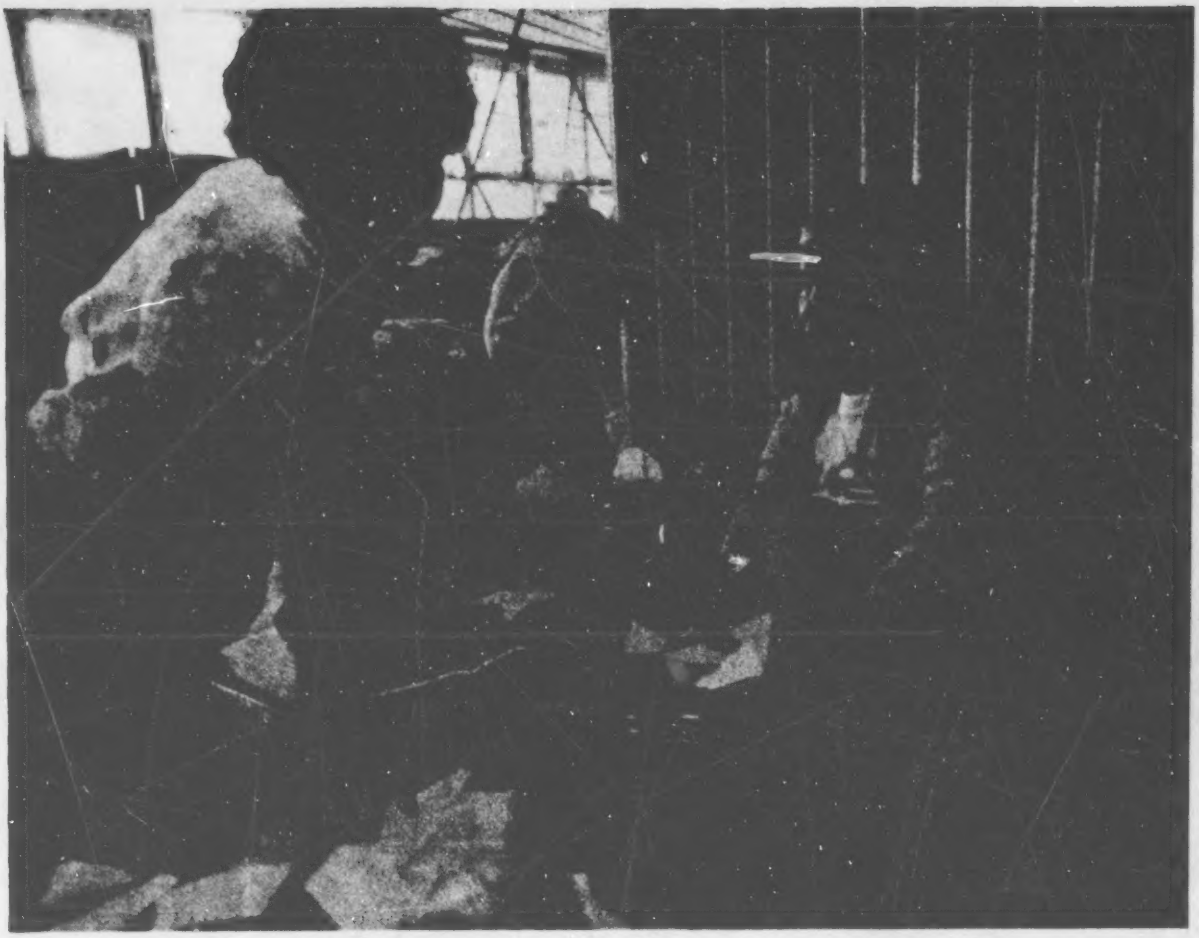
The value of this kind of workshop stemmed from allowing parents some autonomy in their involvement in mathematics. They organised their own time rosters to benefit from group experience or to work alone on the completion of a single item. It was a way towards regular involvement because the parent did need to feel that the teacher would be let down if attendance varied. The ultimate result was that a few did commit themselves to classroom work once their confidence had been enhanced, but even for those that did not, they and the teachers still gained something.

d) School Outreach to Parents

From the parents' viewpoint the most successful general outreach has been the rostered classroom visits in second term. Many mothers have told me how it helped them to realise what their child was like on a normal day at school and to have a chance to chat with the teacher without pressure of large numbers.

An alternative mode for teachers who used this opportunity to inform parents about new activities, was for the class teacher to invite her parents to an informal meeting at lunch, perhaps once per term. This was attempted in Term 1 by three teachers involved in the Project. Attendance was not more than 50 per cent but all those who came enjoyed it. However, more regular meetings like those organised by Kindergarten class teacher Ms Taylor in 1978, were more effective in developing a working relationship with parents and discussing topics of common interest, like discipline.

In conclusion, serious attempts at parental involvement are perhaps best fostered when other parents are used as ambassadors. Parents who are uncertain will be more easily reassured by the parents who have already taken the step and found it worth taking. They will not be reassured by an authoritation approach even if they believe that such an approach is best for their children. The gradual attainment of leadership of parent groups by parents, in partnership with teachers, is an ideal well worth pursuing.



Evaluating children's understanding of shape

PART C

RESEARCH ACTIVITIES

IN 1979

EVALUATION OVERVIEW

When the Project commenced its operations in 1975 it was fortunate to have a comprehensive evaluation document to guide its evaluation activities (Ball and Braithwaite, 1975). Subsequent developments necessitated modifications to be made to some of the instruments suggested for use in that original document. However the general thrust of the evaluation model was maintained. Formative and summative data within and across all programs were collected and special emphasis placed upon the collection of valid process data. The complexity and breadth of the evaluation data collected over the years enables us to believe we have as accurate a picture of the Project's activities and their effects upon its constituent groups, that resources would allow. Inevitably there are gaps and some instruments and procedures we initiated turned out to represent signal failures. But the data are comprehensive, and at a time when we are retrospectively unravelling them, it may be useful to summarise the intention that guided our evaluation endeavours.

First, we believed that we had to adopt a decision-oriented approach as we were committed to providing our various audiences with answers to specific policy questions such as -

> "What particular combinations of resources are most cost-effective for increasing educational growth among our population?"

Answers to questions such as this are important for education administrators and it is essential that such answers be based on sound empirical evidence.

Second, the Project had to evaluate whether each program could attain its stated objectives and to determine the effects each program had on designated sub-groups of children.

Third, the evaluation approach had to be flexible enough to monitor the inevitable changes in programs that occurred as ideas and personnel changed. The realization that over a period of time the developments in the Project were dynamic rather than static, was an important influence upon our thinking.

Fourth, the variables that we chose to collect data on had to reflect the four major measurement domains:
1) initial characteristics of learner, 2) contextual variables,
3) instructional dimensions, and 4) outcomes.

Fifth, we approached our evaluation task on a broader conceptual base than is usual in educational evaluations. This was necessary because the interrelationships among the children, their parents, the school and its community have marked effects on children's development at this particular age level. In essence we have adopted what Bronfenbrenner has termed *ecological* evaluation; for we have endeavoured to gather data on the characteristics of the learners and the surroundings in which they live out their lives, and on the interrelationships that exist between the learners and their environments.

Sixth, data had to be collected which examined the processes within each program as well as product data in each program.

Our attempts to collect data on children in the Project ran into the same difficulties that previous studies have reported. No matter how many times one reads warnings and pointers about the evaluation of early childhood programs, the impact of such cautionary tales is often lost until the process is attempted. The following extract from a previous conference paper once again highlights some of these problems.

SHOULD ALL OUR DATA BE 'HARD' DATA?

When we first began the task of critically reviewing and trialling the potential measures of our objectives, we were concerned about the paucity of measures for children of our targeted age range, which met the traditional canons of reliability and validity. Further, we were concerned at the imbalance in our data collection procedures which would follow by using only established measures which were reliable and valid. Such a procedure would have resulted in completely neglecting data collection in the affective domain. Consequently, we were forced to consider the relative value of collecting 'soft' data which would amplify the more objective data that were to be collected. Essentially questions such as -

> "What is the relative value to an evaluator of a mother stating that she has seen positive changes in a child's behaviour since attending preschool compared with a rating on a scale which is statistically non-significant?"

became matters of debate. We realised that there was a large body of data which could not be classified as objective data, but which nevertheless became essential evidence as to the attainment of the Project's goals.

To resolve this debate we settled on the following as criteria for data collection. First, whether the collection of the data was a feasible task from the standpoints of practicability, costs and personal impact on the potential data sources. Second, whether the potential data can be subjected to appropriate analytical procedures. Third, whether we were going to have a collection of data whose complexity precludes us from ever providing appropriate empirical conclusions within our funding period. Fourth, we have had to be continuously aware of the community's legitimate concern over becoming the subject of continuous enquiry by 'those people from the university'.

How reliable and valid are the measures that are used?

Any evaluator who has attempted to gather reliable and valid evidence from preschool-aged children knows only too well the number of times that reviews of specific measures that show reliability and validity are "not known" or are "highly questionable". It is all too apparent that obtaining reliable measures from preschool-aged children who have never been in a test taking situation before, is difficult. Hence we have had to question the administrative procedures of the measures that we have employed, the validity of the measures and their potential reliability. Unfortunately, we must state that many of the measures we have trialled have had to be discarded on one or more of the above deficiencies.

To overcome these problems we have embarked upon two courses. First, we have developed with the teachers, measures which are criterion referenced and these measures form the basis of our program measures. Second, we consciously avoided, in the initial phase of the Project, having to devise specific Project measures as this constituted yet further re-invention of the wheel. Unfortunately, after we had evaluated most standardized measures for children of this age level, we reluctantly concluded that we had to devise some measures to evaluate our objectives. This development occupied us for a great deal of our time during 1976 and hopefully some of the measures will have greater replicability in future studies of a similar nature in Australia. Thus the answer to our search for reliable and valid measures has been to take a course that we hoped we would not have to embark upon, but the necessity to have measures to answer our specific Project questions overruled our hesitancy about developing new measures.

How do you allow for the great variability in children's performance and behaviours at this age level?

We know how daily specific children's behaviours and value judgments at this age level can be. For example, our initial investigations into locus of control measures gave us a variety of responses, when we asked the same questions in a variety of formats. Which response was the reliable and valid one became our problem. Similar results were obtained with other measures.

A further complication is caused by developmental variabilities in children's performance on standardized tests. For example, a test that measures visual perceptual abilities may be developmentally appropriate at age five but not at age four. How to resolve such an issue? If we devised the test to include items measuring developmentally appropriate tasks at each age level we ran the risk of establishing test fatigue. By splitting the test into two parts we encountered the further variability in responses caused by specific personal events in the child's life on the first or second day of the test's administration.

These are but some of the issues that we have had to resolve in order to ensure that our measures were both reliable and valid.

WHAT ARE THE OBJECTIVES OF EARLY CHILDHOOD PROGRAMS IN AUSTRALIA?

Perhaps more so at this level than at any other level of education, stated objectives have been more conspicuous by their absence than by their presence. Terms and catch phrases abound but when they are analysed for their substantive content and possible application, obfuscation quickly settles in. Teacher educators, directors of preschool centres and teachers in preschools would often state conflicting views concerning the primary objectives of preschool education in Australia. Maybe this lack of clarity about the objectives reflects either a transitional stage in Australian preschool practices or a lack of concern on the part of the educators about the necessity to state objectives. Whatever the cause, this lack of specification causes problems for the evaluator and the statement that each centre "has differing objectives" and "you cannot specify all your objectives" does not help the evaluation process - especially when the organisational/process evidence that has been collected reflects a great similarity in organisation and the learning experiences that are provided in each sessional preschool. Fortunately, there are indications that the preschool educators are realising the value of clarifying their objectives so that evaluations of their programs can be presented in ways that have substantive merit and so will possibly influence the decision makers towards the attainment of the preschool educators' desired goals.

From our perspective, we could only attempt to specify objectives that apply to our programs and thus the generalizability of results can be limited by such a procedure. However, we believe that having loosely stated objectives which perhaps would allow for more generalizability, is less valuable than having more specific objectives. Although generalizability is restricted by choosing the latter alternative, the opportunity for a valid evaluation of our objectives is compensation enough. Certainly by adopting such a procedure we can get closer to answering a major question: "Did we do what we set out to do?"

HOW DO WE RECONCILE THE DIFFERING DEMANDS MADE BY VARIOUS AUDIENCES?

Each of the various audiences for whom the Project has to present results has asked for differing products at the completion of the Project. Policy makers want answers to questions that are concerned with cost-effectiveness, program effectiveness and possible educational benefits. Educationists in other settings want answers to questions that are related to trait-treatment interactions, intended and unintended outcomes, implementation and evaluation procedures and problems. Parents want to know if it is worthwhile to their child to attend a sessional preschool and how these benefits might show up. The funding body has its particular needs in terms of policy input documents. Additionally, the Project staff want answers to questions that have come to interest them, such as the perceived value of personal development courses for parents and high school students. All of these constituents have a legitimate right to have their questions answered. Thus, as evaluators, we must attempt to identify

these audiences and their potential requests, which they often have not expressly stated, and to present the findings in appropriate ways. Moreover, as it is more than likely that previously unidentified demands will appear, the evaluation model must be flexible enough to respond to these emerging demands.

Another problem which inevitably occurs in the very best evaluation models is what to do when a carefully considered element disintegrates before your eyes. For example, we have had to cope with teachers, whom we have specially trained, transferring and so on. How have their actions affected our results? These and other issues necessitate an evaluation model which can maintain its essential integrity but react positively to spontaneous pressures such as those noted. Keeping an even keel in such a tacking situation requires the evaluator to keep the finish line always in sight so that the demands of the various audiences can be met.

SOME OTHER PROBLEMS

We have already encountered the legitimate demands of the teachers and administrators for results from our data collection procedures. Certainly when we have presented them with the evidence that we have collected to date, we have sensed a greater involvement in their part towards the Project. Yet the inevitable delay between data collection, analysis and reporting means that we cannot always present findings as quickly as we would wish. Again, at times there are certain data that we do not wish to present in order to control for possible contamination. Balancing the ethical demands of reporting data wherever possible and not influencing teachers'/ administrators' behaviours is not an easy task. We have a commitment to providing information back to the schools and the community, otherwise we are neglecting our responsibilities to them. We must leave something of value behind so that the society can appreciate the potential benefits from field research.

Lest the above appear to be too pessimistic, our experience suggests that it is possible to reconcile many of these problems. We are getting close to the day when the evaluation of early childhood programs will reveal more of the total impact projects have upon children, parents, schools and the community.

The following sections summarise the development and refinement of the last evaluation instruments used by the Project. In retrospect the range and quality of these instruments reflects the concentrated efforts of members of the Project team.

1. THE TEACHER LANGUAGE INSTRUMENT (T.L.I): DATA COLLECTION AND ANALYSIS ACTIVITIES, 1979

The Teacher Language Instrument (T.L.I.) is one of a series of process instruments designed to provide evidence that the programs had been implemented as intended. The T.L.I. focusses on teachers' verbal utterances in order to monitor the differences in the language patterns used by teachers in the different programs. These differences were hypothesised to exist because of the different curriculum orientation of the four programs examined (Behaviourist, Cognitive, Competency, Contemporary), and the different practices and teaching behaviours implied by their objectives.

During 1979 progress was made in the coding and analysis of the data collected in the preschools in 1977. Preliminary analysis of this data was carried out and these results are set out at a later stage in this report. The coding of the data was a time-consuming, painstaking task which led to some category descriptors being enlarged and rewritten. The establishment of rater reliability was also done at this stage.

During 1979 samples of teacher speech were collected from all five programs which were being implemented in the Year One classrooms (i.e. Behaviourist, Cognitive, Competency, Contemporary and Home Base). The primary aim of this data collection was to provide evidence that programs had been implemented according to their objectives. However, the collection of this data also made possible comparisons between the teachers' language in the Preschool and Year One settings. These data could then be examined for major patterns and the effect that different contexts have on the mode and function of teacher speech. Since at all schools there was more than one class to each grade level, data were collected in non-treatment classrooms to act as a control for data collected in treatment classrooms. The data collection design enabled program practices to be contrasted with school practices.

Data were collected on videotape in the five Year One classes during July 1979, when the programs could reasonably be expected to be implemented in accordance with objectives. Sound quality was ensured by the use of radio microphones. The events of the day were sampled using a mixture of event and time-sampling procedures. Samples of teacher speech were recorded every fifteen minutes during the day, with provision for the collection of extra data should a significant event occur between time-sampling periods. Language samples were collected in 10 minute segments and all contexts prescribed by the program, e.g., small group/large group/individual interactions were taped.

Analysis of the 1979 data is currently being carried out and the subsequent discussion is based on data collected in the 1977 preschool classes.

Results of 1977 Preschool Data

The data were analysed using the SPSS Condescriptive Program so that a percentage breakdown of the different teacher verbal behaviours and functions could be examined for each program. The percentage data were then ranked in terms of total percentages of the broad categories of *mode* and *function* * and the ranks compared across programs (see Table 6).

TABLE 6: Ranks order of broad categories of the T.L.I for the four programs

Rank	Behaviourist	Cognitive	Competency	Contemporary
A. Mode				
1.	Stating (33.04%)	Questioning (32.48%)	Questioning (32.43%)	Stating (35.88%)
2.	Questioning (25.07%)	Stating (29.03%)	Stating (27.09%)	Questioning (25.51%)
3.	Facilitating (18.12%)	Facilitating (21.02%)	Facilitating (19.26%)	Eliciting (19.08%)
4.	Eliciting (14.31%)	Eliciting (13.97%)	Eliciting (18.22%)	Facilitating (16.2%)
5.	Reinforcing (9.47%)	Reinforcing (3.53%)	Reinforcing (2.94%)	Reinforcing (3.23%)
B. Function				
1.	Regulatory (48.23%)	Regulatory (44.79%)	Regulatory (44.10%)	Regulatory (41.13%)
2.	Heuristic (32.81%)	Heuristic (37.65%)	Heuristic (40.93%)	Heuristic (33.17%)
3.	Social (15.66%)	Social (13.8%)	Social (12.64%)	Social (21.71%)
4.	Resource (3.27%)	Resource (3.45%)	Resource (2.26%)	Resource (3.81%)
5.	Administrative (10%)	Administrative (0.55%)	Administrative (0%)	Administrative (1.45%)

* See 1978 Annual Report for description of these terms.

The similarity in the ranks of the broad categories show that the verbal behaviours of the teachers in the four programs were consistent in terms of proportion of language behaviour occurring in the teaching/ interaction time available to them.

However, some crucial differences occurred. The Cognitive and Competency teachers showed a preference for questioning strategies (Table 6). For the Cognitive Program this reflects the teaching style that teachers are encouraged to adopt. For the Competency Program, evaluation of the children's skill in various competencies was an integral part of the teacher's role during the day.

Teachers in the Contemporary Program tended to elicit rather than facilitate responses from the children, although the difference was not large. This outcome may be a result of the emphasis the program placed on allowing children to explore the environment as free from adult intervention as possible. Intervention may therefore only come at a time when a direct, quick result is necessary, hence the use of an eliciting technique ahead of a facilitating one.

In order for the rate of occurrence of *functions* were *regulatory, heuristic, social, resource* and *administrative* across all four programs. Between 40% and 50% of utterances served a regulatory function, and heuristic behaviour accounted for 33% to 40% of utterances. Utterances with a *social* function made up from 13% to 22% of total utterances, at individual sites.

More interesting program differences are revealed by comparing the frequency of behaviours in the subcategories of the instrument (see Table 7b).

The most interesting category in the *mode* section of the instrument was the *questioning category* because this category revealed significant teaching style differences. Teachers in the Cognitive program asked many more open questions (22.90%) than simple questions (7.07%), and they asked more open questions than teachers in the other programs (see Table 7b). While teachers in the Competency Program asked as many questions as teachers in the Cognitive Program, their responses were more evenly divided between open questions (17.76%) and simple questions (12.99%). Teachers in the Contemporary Program divided their questioning behaviour evenly between simple (13.99%) and open (11.45%). Socratic questioning was infrequent in all programs but was slightly higher in the Cognitive than in the other programs.

TABLE 7a

T.L.I. 1977

PERCENTAGE OF OBSERVATIONS IN EACH CATEGORY FOR EACH SITE AND AS A TOTAL*

Mode	Behaviour -ist	Cognitive	Competency	Contemp- orary	Combine
STATING					
Show	12.60	9.17	6.62	9.24	9.50
Tell	20.30	19.64	20.47	26.63	21.60
Lead	00.14	00.24	00.00	00.00	00.09
Total Stating	33.04	29.03	27.09	35.88	31.21
QUESTIONING					
Simple	9.47	7.07	12.94	13.99	10.78
Open	14.31	22.90	17.76	11.45	16.63
Socratic	1.29	2.51	1.73	00.86	1.43
Total Questioning	25.07	32.48	32.43	25.51	28.84
ELICITING					
Command	13.62	11.68	17.23	16.54	14.73
Request	00.27	1.81	00.76	1.44	1.03
Recognition	00.41	00.48	00.23	1.10	00.53
Total Eliciting	14.31	13.97	18.22	19.08	16.29
REINFORCING					
General Praise	6.00	2.67	2.18	1.76	3.28
Specific Praise	3.00	0.48	0.23	0.34	1.09
Negative	0.48	0.39	0.60	1.10	0.63
Total Reinforcing	9.47	3.53	2.94	3.23	4.97
FACILITATING					
Affirmative	17.58	19.45	18.66	14.51	17.62
Responding	00.55	1.38	00.23	1.76	00.95
Total Facilitating	18.12	21.02	19.26	16.20	18.69
	100.00	100.00	100.00	100.00	100.00

* Percentages are rounded off to two decimal places

TABLE 7b

T.L.I. 1977

PERCENTAGE OF OBSERVATIONS IN EACH CATEGORY

FOR EACH SITE AND AS A TOTAL*

Function	Behaviour -ist	Cognitive	Competency	Contemp- orary	Combine
REGULATORY					
Motivating	23.78	20.56	16.93	14.93	19.28
Instructing	14.05	12.71	14.98	8.22	12.82
Control	9.81	11.53	12.34	17.98	12.71
Total Regulatory	48.23	44.79	44.10	41.13	44.79
HEURISTIC					
Evaluative	24.52	32.00	31.53	25.52	28.35
Knowledge	8.31	5.65	9.40	7.64	7.79
Total Heuristic	32.81	37.65	40.93	33.17	36.14
SOCIAL					
Social Interaction	9.40	6.20	5.79	13.83	8.70
Personal	6.26	7.60	6.78	6.96	6.88
Imagine	0.00	0.00	0.76	0.94	0.23
Total Social	15.66	13.80	12.64	21.71	15.82
ADMINISTRATE					
Total	0.00	0.55	0.00	0.17	0.17
RESOURCE					
Total	3.27	3.45	2.26	3.81	3.18
	100.00	100.00	100.00	100.00	100.00

* Percentages are rounded off to two decimal places

In the *reinforcing mode* teachers in the Behaviourist Program provided more instances of both general and specific praise than teachers in all the other programs.

In the pattern of *functions* shown in teachers' speech, the Contemporary Program differs from the other programs along two major dimensions. Firstly, not only were teachers in the Contemporary Program slightly less regulatory than teachers in the other three programs (see Table 7b), but they used different means to regulate the behaviour of children. They tended to control (17.48%) and motivate (14.93%) and they instructed less (8.22%). The low incidence of instruct is consistent with program goals, which specified that teachers should allow children to use materials in a variety of ways and encourage children in divergent behaviours. The Contemporary Programs teachers used language to exercise a contro function more than teachers in other programs. The control category encompassed a wide range of meanings ranging from giving choices to commanding. Giving choices is an appropriate activity for teachers in the Contemporary Program, and further reference will need to be made to the context of the interaction to determine the emphasis in regulatory strategies for these teachers.

Teachers in the Behaviourist and Cognitive Programs showed a different pattern of language which had the function of regulating children's behaviour (see Table 7b). Their main strategy was *motivation*, followed by *instruction* and then *control*. In the case of the Behaviourist teachers, the *motivate* function accounted for 50 percent of all regulatory behaviours. Perhaps these teachers found motivation a useful supplementary technique to reinforcement as a means of shaping children's behaviour.

The second way in which teachers in the Contemporary Program differed from other teachers was in the frequency of language used within the *social function* of the T.L.I. (see Table 6). 21.71 percent of teacher verbal episodes fulfilled a *social interaction function* compared with Competency (12.64%), Cognitive (13.8%) and Behaviourist (15.66%). The Contemporary program had specific and important goals in the area of the children's social development which is reflected in the language behaviours of the teachers.

The pattern for the *heuristic* function was similar across all programs, in that all teachers used *evaluation* for heuristic purposes much more often than the input of information or knowledge function (See Table 6). Teachers in the Cognitive (32.0%) and Competency (31.53%) Programs used the evaluative function more often than teachers in the Behaviourist (24.52%) and Contemporary Program (25.52%). This information complements the patterns of response for the questioning mode. In the case of the Cognitive Program this is a significant Program variable. It is interesting information about the development and implementation of the Competency Program, as there was no specification of any particular style of verbal interaction for its teachers.

Discussion

The TLI was designed to assess the language behaviours of teachers implementing four programs of different curriculum orientation. At one extreme, the Contemporary Program was flexible in regard to teaching styles, emphasising that children regulate their own learning experience while the Behaviourist Program specified teaching routines and curriculum content. The Cognitive Program builds its curriculum around Piagetian theories and extrapolates its teaching strategies from it, while the Competency Program emphasises developing school-related competencies and pro-social behaviours in the children, but does not specify teaching style.

The data were presented as a comparison of the frequency of occurrence of teachers' verbal episodes in both *mode* and *function* across the four programs. The following findings were reported for each program.

1. The Behaviourist teachers used *motivation* more than *reinforcement* as a technique for shaping the behaviour of the children. The regulatory function accounted for almost 50% of their total utterances.
2. The Cognitive Program data revealed a strong *questioning* strategy in the language of its teachers. In particular, *open* questions, which encourage divergent responses from the children were a feature. These teachers also showed a strong tendency to *evaluate* the children through verbal interaction.
3. Teachers in the Competency Program developed a pattern of language mode and function similar to that shown by the Cognitive teachers. They used the *questioning mode* more than the stating mode, used the evaluative *function* more often than teachers in the other programs.
4. The language behaviour of the Contemporary teachers presents a different pattern in the use of functions from teachers in the other programs. They *instructed* very little, but regulated children's behaviour through *motivation* and *control*. Teachers in the Contemporary Program also used language to serve a *social* function, particularly that of promoting *social interaction*.

While further analysis is necessary to uncover the subtleties of verbal interaction in the classroom, the findings uncovered by this study indicate that the four programs were implemented along intended guidelines. These differences are reflected in the language of the class teachers, when considered according to *mode* and *function*. The T.L.I. served its purpose as an instrument which would look at program differences in teacher language.

2. THE ASSESSMENT OF CHILDREN'S LANGUAGE DEVELOPMENT, 1979

Recent research strongly suggests that the ability to use language effectively is essential for success in school activities. Various studies have separately assessed children's achievement in language -based curriculum activities, such as reading and writing and their linguistic development. While it is reasonable to assume that the development of formal school skills is related to general linguistic development, the connection between the two sets of skills has not been carefully investigated. Certainly, information on how young children handle language in the classroom context can assist with explaining their performance on specific curriculum tasks such as reading, reading fluency and comprehension. In addition, a thorough evaluation of the language development of the children will assist in describing more fully the effects of the different programs as implemented, on the children enrolled in them.

Data were collected to evaluate the children's development in both vocabulary and syntax. The vocabulary measure used was the Peabody Picture Vocabulary Test (PPVT), which had been administered to Kindergarten children in 1978. A new measure, based on the Record of Oral Language (R.O.L) was devised to assess syntax. The development of this measure is outlined in this paper. In addition, spontaneous speech samples of ongoing language interchange in classrooms were collected to complement test data collated in the areas of vocabulary and syntax.

Vocabulary

Data had been collected on Kindergarten children on the Peabody Picture Vocabulary Test (PPVT), a receptive measure of children's vocabulary mastery. It seemed sensible to continue with this instrument which is an open-ended test and therefore can reveal a range of ability among the test populations. In the Kindergarten year results on the PPVT had pointed to some differences between the performance of children in different programs.

Syntax

Open spontaneous language interchange between teacher and child and amongst the children themselves will help to promote the understanding and use of a wide range of syntactic structures. We needed a measure which would describe the children's syntactic development. The syntax measure used tested the children's control of the set of structures selected. Some of these were more complex than those children use in day-to-day communication.

The Record of Oral Language (R.O.L.) is an instrument devised to assist teachers in diagnosing particular weaknesses in the young child's control of grammar. It has a solid theoretical base and systematically develops structures to be examined. Attention has been paid to validity questions in the selection of sentences and the reliability of the instrument is well established.

The elicitation method used is imitation, which is a well-respected tool in psycholinguistics. It has yielded reliable data in other research studies. Sentences are presented orally by the tester to the child who would then attempt to repeat it, e.g.,

E. I would like you to say some sentences for me.
Here is the first one -
Say, - Tom is running to school.
Ch. (attempt to repeat sentence)
E. Good. Now say - I want Bill to come, etc.

This measure yields information on the productive control that children have over the structures to be tested. A wide range of sentence types was tested as well as some developmentally significant syntactic structures, e.g., yes/no questions, 'wh' questions, tag questions, negatives, relative clauses and adverbial clauses (some examples are listed in Figure 11). In addition, the type of error made in imitation was classified under the following categories - omission, substitution, addition, contraction, transposition.

EXAMPLES OF STRUCTURES USED FOR SYNTAX TESTING

My father's radio is broken.

The boy by the pond was sailing his boat.

All the children talked loudly to each other at the table.

John is giving me a book.

Can you see what is climbing up the wall?

There goes the fireman who put out the fire in the factory.

She's driving her car quickly.

Have you broken my toy trains?

Why did your mother go to the shop?

The children haven't run away, have they?

The boy swam across the river, didn't he?

The children are not running across the road.

I saw the rocket which went to the moon.

The boy went to the house where his mother lived.

FIGURE 11: Examples of structures used for syntax testing

Language Production/Fluency

Teacher language in the classroom has effects on the language and behaviour of the children in the class. Classroom interactions have been carefully studied to ascertain the ways in which teacher language can stifle or promote the children's use of language in the classroom. Since the programs suggest different methods of implementation, one would expect to find differences in the children's language especially in function and fluency. Differences in function result from the different physical and social environments built up in program implementation, and differences in fluency may arise from the fact that some programs allow more time for free talk by children than others. This hypothesis was tested by collecting language samples from individual children in each of the treatment groups.

The following guidelines were adopted for the final collection of data:

a) A group of 10 children per site was selected from each of the treatment groups (Final sample = 50).
b) Two periods of speech each 5 minutes in duration, were collected for each child.
c) The 10 different episodes of speech collected were to be representative of events in that program for the day.
d) The data would be collected by a radiomicrophone attached to the child's person and the child would not be aware that his speech was being taped.
e) Contextual features would be noted by an observer on a schedule designed for the purpose.

The collection of process and product data, will provide a thorough assessment of the children's linguistic knowledge and their language skills. The evaluation model is a flexible one, allowing hypotheses to be tested concerning language competence and language in use. Program implementation can be further verified by an analysis of children's talk in daily interaction in the classroom.

Mathematics activities using cuisenaire rods

3. FIRST GRADE MATHEMATICS

As in other years tasks were designed to supplement the numeracy tests given to the whole sample. Since the conceptual tasks were more time consuming they were administered to a smaller sample, the core group plus controls. Twenty children were tested from each school site, twelve of whom were in the experimental group (i.e. preschool and treatment class) and eight of whom were neither preschoolers or had been in the experimental follow through classes.

Tasks were designed to reveal the developmental levels of the children in three areas. Firstly their ability to cope with spatial and temporal sequences was assessed. Performance on these tasks was compared with number sequencing achievement.

Secondly, children were asked to anticipate the results of spatial transformations with and without feedback, and to translate three dimensional figures into graphic representations of their surfaces.

Finally the child's understanding of equivalence was tested by the use of twenty five cards on which were depicted sets of like and unlike objects which were joined by the equivalence sign. This task was designed after teachers had been asked in detail about their methods for introducing the plus, minus and equivalence signs. Since teacher language was so varied it was decided that pictures only should be used.

A. SEQUENCE

1. Time sequence - FRED

There were two different sets of four cards each. FRED was the set which depicted four scenes from daily life; waking up, going to school, having dinner with mother and father and going to bed. The pictures were trialled and modified to adjust for perceptual ambiguity. The cards were presented at random and the child was asked to order them so that s/he could "tell a story". The order was recorded. The child could choose any of the cards with which to begin the sequence but the four correct solutions were FRED, REDF, EDFR or DFRE. The order of the cards was then changed into three different sequences and the child was asked to judge whether the sequence shown was correct or incorrect. If the child had not made the first sequence correctly, the Experimenter adjusted the order of the story before asking for correct or incorrect statements about three permutations which she made.

2. Spatial Sequence - the oscillating wave.

Four cards made one complete wave oscillation which could be variously represented in the order WAVE, AVEW, VEWA or EWAV (see Figure 12). Any other order was incorrect. A small model ( ) of a repeated oscillation was displayed for reference purposes. Again the child was presented with a random arrangement and asked to put them so that the lines joined and the grey shaded part was always at the bottom. Again the order was corrected if necessary and several permutations were made by the Experimenter for the child to judge correct or incorrect.

3. Numerical order

The cards with numerals 31,32,33 were presented in random order. The child was asked "Which comes first?" then "Which comes last?" and then asked to put them in the correct order. Reversals were noted in these and prior sequences.

B. Spatial Transformations

1. Line-to-Corner Alignment

Two cardboard squares were provided. They were placed together to form a rectangle and the child was asked to name the shape. Then s/he was asked to predict what it would look like if the square above were displaced to one side so that they were out of alignment (see Figure 12). They were then asked to draw the new shape, then were shown 4 possible choices of what the new shape would be like drawn on a card. After selecting one they were asked to move the square in the predicted direction (Experimenter drew a facsimile) and afterwards to draw the shape they now saw.

2. Polyominoes

Five identical cardboard squares were given to the child who was to construct any shape as long as one side of each square was in contact with the side of another, corner to corner. Correct examples, incorrect examples, and repetitions of the same pattern were drawn by the Experimenter. The child had been asked to repeat the rule at the beginning and was asked if the example obeyed the rule when the Experimenter was in doubt, allowing for corrections.

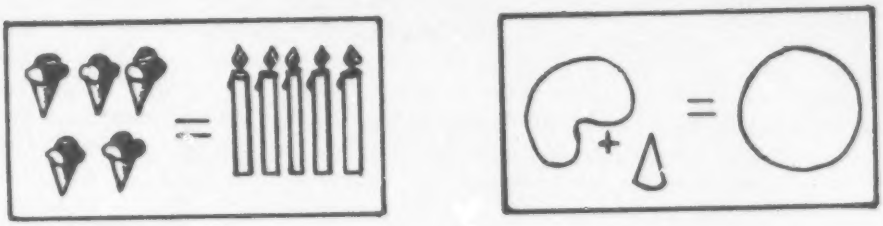
3. Prediction of Surface Area

Four solid wooden shapes were provided for the child to examine. The first was a cube, the second was a pyramid, the third a cylinder and the fourth a cone. A box of sticky backed coloured papers representing correct and incorrect surfaces of these objects was provided. They were of various sizes. The child was asked to choose the pieces that would make the shape solid if wrapped around or placed on the sides, then to stick the chosen shapes to the record sheet. Each shape was dealt with in turn and in the same order for every subject. Scores took into account shape correctness, numbers of pieces chosen and any attempts at 3 dimensionality.

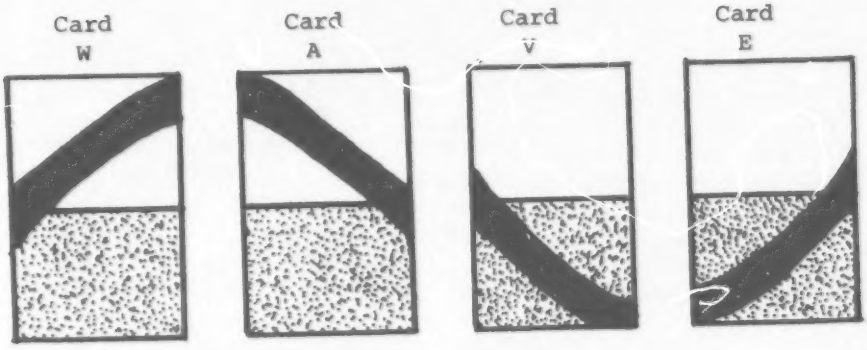
C. Equivalence Sign Usage with Objects and Figures

Twenty five cards had been constructed by glueing representations of familiar objects, shapes, and numbers on small cards. They were organised so that two groups of objects, shapes or numbers were always connected by the = sign. The task was to say whether the representations were right or wrong. The sign was provided as an alternative if needed. Before testing, a pretest was administered to each child using coloured counters as a check on conservation, and one to one correspondence. Also the signs + - and = were shown separately on cards to each child and s/he was asked what they meant. If necessary counters were used to illustrate the meanings. Also, there was a language pretest on the comprehension of the words 'the same' using the counters. It was recorded whether each child used number as a basis for equivalence judgment. These cards were then used to check the children's knowledge of identity statements, equivalence of sets, equations using two signs and spatial equivalence.

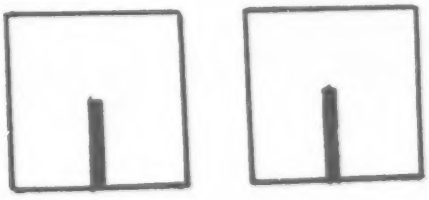
FIRST GRADE MATHEMATICS



Two examples of Spatial Equivalence cards

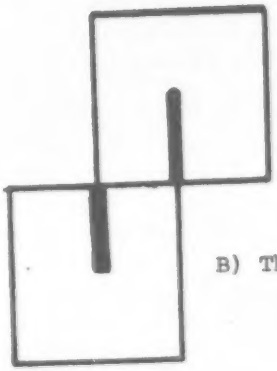


The four Spatial Sequence cards



Spatial Transformation :

A) The two cardboard squares



B) The solution

FIGURE 12: Examples of materials used in the Mathematics Task

a) Identity statements

Six cards, 3 of which were correct examples of identity and number equivalence, and 3 of which were incorrect, were shown one after the other. Incorrect cards occurred every second task (only one child pointed this out). Example 1a showed four identical cars on each side of the equivalence sign. The child was asked if this was right or wrong. Sometimes s/he said that the sign should be at the end (open statement) and if so the counters were used to show that = could be in the middle of two sets. Example 1b showed identical teapots but not identical numbers on each side. Thus the child's attention was focussed on number. Variations of identity included spatial rearrangement and size difference.

b) Equivalence of sets of different objects

In this case the same principles used in the identity statement governed the choice of pictures and their order of presentation except that the objects were never identical. In two examples symbols (blobs) were used instead of objects. There were eight cards in this section.

c) Combinations or equations using two signs

The first four cards in this series had identical objects pictured in combinations for example, six umbrellas - 2 umbrellas = 5 umbrellas. Again the child had to say whether the card was right or wrong. In the next two examples symbolic shapes were used (triangles, half circles etc) and in the final example of the series there were dots in two groups joined by a + sign and a numeral on the other side of the = sign.

d) Spatial equivalence

These cards were similar and represented equations as before but they were not numerical: for example 3/4 of a circle + ¼ of a circle (pictured) = a circle. There were four of these varying in shape, degree of symbolism and + or - sign (see Figure 12).

Total correct judgments were scored and information was recorded regarding idiosyncratic responses, levels of difficulty etc. It is anticipated that this more extensive recording of response should provide a more comprehensive picture of the extent and nature of the children's mathematical abilities than would raw scores alone. The data are still being analysed, but it is expected that a full description of the children's mathematical abilities as revealed by these tasks will emerge.

4. YEAR ONE YEARLY OBSERVATIONS (YOYO), 1979

A INTRODUCTION

Teachers' ratings of children's behaviours in Year One classes were an integral part of the evaluation procedures of the Project. In 1977 and 1978 these ratings were recorded on the Preschool Observation Schedule (POS) and the Kindergarten Rating Schedule (KRS), which were structured scales consisting of thirty behaviours (see Annual Reports 1977, 1978). Teachers completed their ratings on all children in the class. In 1979, however, the method used to collect the data was changed. Teachers were asked to select children for further rating on the basis of whether they were above or below average in classroom performance. The aim of this procedure was to identify a group of children whose classroom performance warranted further comment. Teachers remarked on the child's performance in specified areas. The behaviours rated by the teachers covered the following areas:

a) Logical Development: number, spatial, measurement, problem solving, sequencing.
b) Language Development: vocabulary, sentence formation, communication, expressive/interpretive, word recognition, reading comprehension.
c) General Knowledge: health, hygiene and safety, science, social procedures and social studies.
d) Strategies: questioning, persists, reasons, predicts, divergent, imaginative.
e) Attitudes: cooperative, initiates, independent, sociable, responsive.
f) Perceptual/motor/physical: perceptual, fine motor, gross motor, health.

An example of the format of the YOYO is shown in Figure 13.

AREAS/CATEGORIES	+/-	CHILD BEHAVIOUR	ACTION
A. LOGICAL			
1. Number (counting, adding, subtracting)			
2. Spatial (shape recognition, direction, position, comparisons)			
3. Measurement (distance, use of units, estimation, size)			
4. Problem Solving (cause/effect, prediction, deduction)			
5. Sequencing (seriation, temporal order, logical order)			

FIGURE 13: Format for the Year One Yearly Observations - Example Category: Logical Abilities

These areas were regarded crucial to evaluate since they tended to be common interests shared across the five programs. As the teachers are the adults who have the greatest frequency of contact with the children, apart from their parents, the teacher's perceptions of children's behaviours are considered to be an important ingredient of the evaluation process.

The YOYO was also designed to function as a diagnostic instrument. It was hoped that having teachers rate children's behaviours would focus their attention on each child's strengths and weaknesses, and encourage appropriate action to facilitate further development. Project staff were available to discuss all aspects of this process with teachers.

B Development of the Instrument

In light of the above and from previous research experience it was decided to design an instrument which could assist in evaluating some of the Project's objectives. The Project staff first identified the interest areas and then suggested behavioural categories reflecting these areas. However, unlike the Preschool Observation Schedule which was tightly structured, the current instrument (YOYO) was relatively open-ended. A major criticism by teachers and others of the earlier rating scale was that thirty behavioural items had been selected. This was an arbitrary process producing a restricted set of behaviours which teachers felt did not always highlight the strength and weaknesses of the children being described. To overcome this problem teachers chose the behavioural descriptors they considered best suited the child being rated.

C Method

The Project teachers were requested to rate all their pupils on the instrument over the month of November 1979. Figure 14 details the instructions given to teachers to complete YOYO.

At the end of November, 1979, the data were collected and are currently being analysed. The following questions were framed to guide data analysis -

1) Did teachers tend to elaborate on any particular domains at the expense of others?
2) Did any behavioural differences emerge between preschoolers and non-preschoolers?
3) Did any behavioural differences emerge between boys and girls?
4) Did any differences emerge among ratings that may have been influenced by programmatic emphasis?
5) What behaviours did teachers describe to indicate the domains of interest?

Dear Colleague,

This instrument seeks information on each child in the following areas: (A) Logical Thinking; (B) Language; (C) General Knowledge; (D) Strategies; (E) Attitudes; and (F) Perceptual/Motor/Physical Development.

Within each area there are a number of categories. For example, in the Language area you will find the following categories: 6. Vocabulary; 7. Sentence Formation; 8. Communication; 9. Expressive/ Interpretive; 10. Reading-Word Recognition; and 11. Reading-Comprehension.

NOTE: YOU ARE REQUESTED TO RATE ONLY THOSE CATEGORIES WHERE THE CHILD'S PERFORMANCE IS ABOVE (+) OR BELOW (-) AVERAGE.

INSTRUCTIONS FOR ADMINISTRATION

1. Classification - For each child record a + (ABOVE AVERAGE) or a - (BELOW AVERAGE) in the classification column to indicate skill level in the appropriate category. Simply leave blank all AVERAGE ratings. Classification is required for only those categories where the child's performance is regarded as superior or problematic.

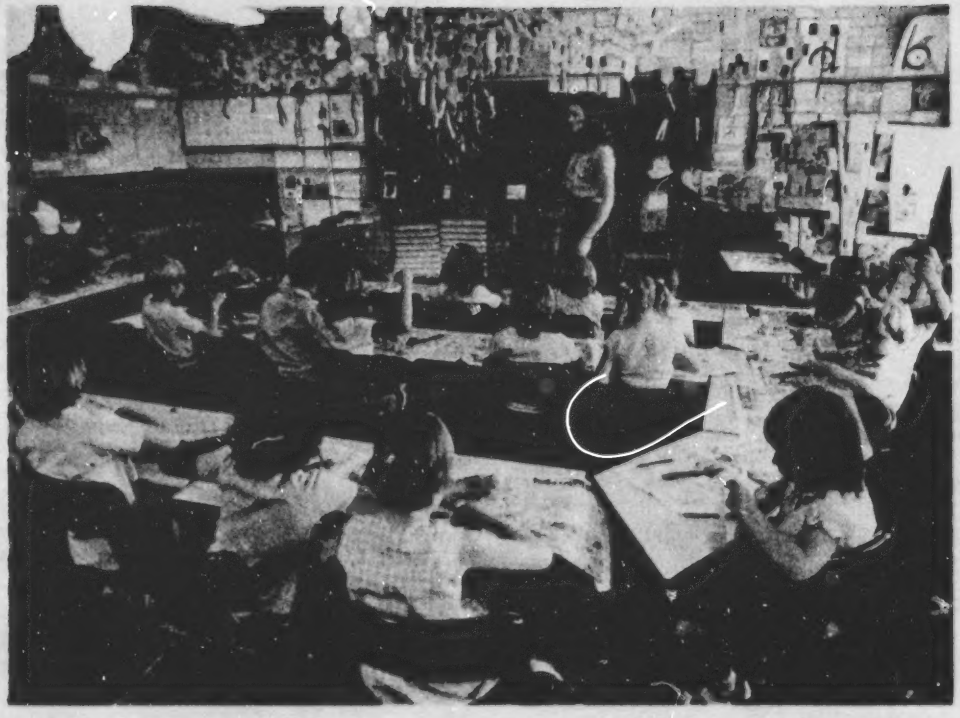
2. Description - For each category coded either + or - please detail particular examples of the relevant behaviours that lead to your classification of + or -.

3. Action - Indicate any action which has been/or should be taken in relation to the + or - classification.

EXAMPLE

AREA: LANGUAGE	+/-	DESCRIPTION CHILD BEHAVIOUR	ACTION
6. Vocabulary	+	Frequently initiates verbal contact with one and other children. Discusses a variety of topics and talks about them revealing a surprising range of unusual words.	A mother has prepared a "surprise"packet for such children containing unusual objects like a "torch" or a "telescope" and the mother prompts the children to label and discuss various parts of the object in relation to its use. These words are then recorded in the children's personal dictionaries.
7. Sentence formation	-	Verbal expression competent but in written form structuring of the sentence is quite confused	Supervision during Sentenence Maker, having child check the sense of the written sentence and restructuring if confused. This appears to be helping in that the frequency of faulty constructions has reduced. Could do with more one-to-one assistance.
8. Communication		(A blank indicates average performance). No comment to be made.	

FIGURE 14: Instructions to Teachers Concerning Use of YOYO.



Children involved in craft activity

5. PARENT INTERVIEWS 1979

During 1978-79, Project activities in promoting parental involvement in schools were increased. This process has led to greater attention being directed towards broader community issues (Annual Report 1978). Consequently, changes were made in the content of information sought from parents and the style of interviewing used. In 1979, the major emphasis was placed on eliciting attitudes from parents on a broad band of issues related to schooling.

This was an important difference from the emphasis given to data collection in previous years. P.E.P.I., an instrument used in 1977, the preschool year, asked parents to evaluate changes in children's behaviour as outcomes of different programs. In the Kindergarten year, P.A.P.P. was designed to find out parent perception of issues within the context of school programs. The issues dealt with by this instrument were:- communication between parents and schools, parents at school (involvement), parents' perceptions of programs (attitudes), parents as teachers (skills/styles). In 1979 a case-study approach was adopted, and parents were asked to give their opinions and attitudes to a range of issues connected with schooling in general. They were able to comment on program effects on their children in the course of the interview. The major areas covered in the interviews were; their child's preschool experience, the child's record of scholastic success, their opinion on the level of high school success their child will obtain and employment prospects. Parents were also asked about the level of their own involvement in school activities. Information was sought on parents' attitude to their own school experience. Some of the questions asked included:

Why did you send your child to preschool?
Did you get involved with the preschool?
Do you think your child will pass exams in high school? Which ones?
What sort of job would you like your child to have when he leaves school?
How does the schooling you had compare to the schooling your child is experiencing?

Procedure

Independent interviewers met with parents at home to complete the survey. The response was most encouraging. Of the 42 people contacted only 4 refused, 5 would have willingly participated if an evening interview could have been arranged and 33 welcomed the opportunity to share their views. However, 8 of these people were not at home at the arranged time. A final sample of 25 interviews was obtained. The interview format consisted of a set of open-ended questions. The interviewer attempted to engender a relaxed, informal atmosphere, so that parents would feel free to elaborate on any issue at length. Many parents were enthusiastic about expressing their views. Each interview lasted approximately 1½ hours although a couple of parents spoke for up to 3 hours. The interviewer recorded parent responses and made contextual notes during each discussion and these were typed up as case study material. This material is being analysed at the time of writing.

It is hoped that these interviews will reveal information about parental attitudes to the schooling process and its connection with their child's later activities in life. It is expected that attitudes to the innovative programs experienced by their child and an evaluation of their long term gain will be derived from these case studies.

PART D

FUTURE DEVELOPMENTS

PART D

FUTURE DEVELOPMENTS

This document represents the final report of the action program of the Mt Druitt Early Childhood Project. As did its four predecessors, it summarized many of the ongoing activities during the previous year's operation. However, unlike past reports, it does not indicate what future actions are planned, for 1979 marks the final year of comprehensive funding of the Project. The activities scheduled for completion in 1980 are essentially capstone activities. They include :

- intensive activities in the area to finalise data collection from children, parents, schools and agencies such as the Polyclinic;
- helping schools in the gentle "weaning" process by responding wherever possible to requests for assistance;
- coding and analysing the data obtained during 1979 and interpreting the results;
- and of course the completion of the manuscripts detailing the development and results of the Project's activities since 1975.

Yet there remain many other tasks that should be undertaken. Primarily, the data obtained from the Mt Druitt sample represent a unique base for the constitution of an Australian longitudinal study. To date no other study has generated so much comprehensive data on a group of disadvantaged children. The potential payoffs for carrying out such a study are worthwhile and would be of benefit to educational research in Australia.

PAPERS AND ARTICLES PUBLISHED IN 1979

1. Alexander, J. & Clark, A. Evaluation of Five Preschool Programs. Australian Educational Researcher, 1979, 6, 2, 66-77.

2. Alexander, J., Belme, J., Clark, A. & Gray, A. The Mt Druitt Early Childhood Project. Paper presented at the Australian Preschool Association Conference, Sydney, May 1979.

3. Belme, J. & Gray, A. An Analysis of Preschool Teachers' Classroom Language. Paper given at the conference of the Australian Association for Research in Education, Melbourne, November 1979.

4. Healey, M. Home Based Teaching in Mt Druitt, N.S.W. Paper presented at the Australian Preschool Association Conference, Sydney, May 1979.

5. Healey, M. Early Childhood Mathematics. Paper presented at the Mathematical Education Research Group in Australia Conference, Brisbane, May 1979.